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Plate XV.

VENETIAN GLASS.

CATALOGUE

OF THE

COLLECTION OF GLASS

FORMED BY

FELIX SLADE, Esq., F.S.A.

WITH NOTES ON THE HISTORY OF GLASS MAKING,

BY ALEXANDER NESBITT, Esq., F.S.A.

AND

AN APPENDIX

CONTAINING A DESCRIPTION OF

OTHER WORKS OF ART PRESENTED OR BEQUEATHED BY Mr. SLADE TO THE NATION.

PRINTED FOR PRIVATE DISTRIBUTION.

1871.

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PRELIMINARY NOTICE.

The main portion of this work was approaching completion when death carried off the owner of the collection which it describes. It will be well, therefore, to prefix a short account of the distinguished connoisseur, by whose liberality the valuable collections illustrated by this work have now become the property of the nation.

Felix Slade was born at Lambeth, in August, 1790. He was the second son of Robert Slade, who was well known among politicians of the Liberal school, and who for many years was Secretary of the Irish Society. His mother was Eliza, daughter of Edward Foxcroft, of Halsteads in Thornton in Lonsdale, Yorkshire; and in consequence of the failure of male issue in the Foxcroft family, her eldest son, William, and, on his death, Felix, successively inherited the estate of Halsteads. The two brothers were educated to the study of the law, and succeeded their father as proctors in Doctors Commons.

Mr. Slade had at an early period in life shown considerable taste for artistic pursuits, to which a voyage through Italy in 1817 gave a stronger impulse. His interest was, in the first instance, directed to engravings and books relating to the Fine Arts, and he made a valuable series of illustrations for the works of Shakespeare, Byron, and Dibdin. More recently he turned his attention to choice editions of books and ancient book bindings, as well as to Venetian Glass. In the latter branch he formed a collection, probably unrivalled, as may be seen in turning over the pages of this work. Of engravings and etchings he brought together a magnificent series, remarkable not so much for mere rarity as for the fine condition of the individual specimens, and the satisfactory illustration that they furnish of each master and school.

Mr. Slade was at all times very liberal in showing his collection to those interested in similar pursuits, as well as in lending them to various bodies for exhibition. For instance, in the Mediæval Exhibition, 1850, the Manchester Exhibition, 1857, the Exhibition in Ironmongers Hall, 1861, the Loan Exhibition at South Kensington, 1862, and the Leeds Exhibition, 1868, many fine specimens from Mr. Slade's collection were to be noticed.

Mr. Slade died on the 29th March, 1868, and by his Will he bequeathed to the British Museum his collections of glass and engravings, some Japanese carvings in ivory, and such of his other works of art, ancient bindings and manuscripts, as certain of his executors should select.

It has been estimated that the cost of the collections thus bequeathed to the

nation (including a sum left to be expended in additions to the collection of glass) was not less than £28,000.

Mr. Slade did not confine to this magnificent bequest his desire to advance artistic studies. He bequeathed to his executors a sum of £45,000 to enable them to found Professorships for the advancement of Fine Art at the Universities of Oxford and Cambridge, and at University College, London, as also six scholarships of £50 each at the latter place. He desired likewise that the parish church of Thornton in Lonsdale should be restored or rebuilt.

These intentions of the testator have been carried out by his executors, and it is hoped that these liberal bequests may have a satisfactory result and may be useful in encouraging the study and practice of Art in this country.

Having been requested by Mr. Slade to complete this work, and finding that some time must elapse before some of the illustrations, etc., were finished, I have thought it desirable to include in an Appendix an account of such Works of Art besides glass as have been bequeathed to the nation by Mr. Slade, or presented by him in his lifetime. This has been done in a succinct manner, but the very great extent of the collection of prints has occasioned some delay.

AUGUSTUS W. FRANKS.

PREFACE.

The fragile products of the Venetian Glass works attracted my attention many years since by their beauty and elegance of form. It was at a period when, save by a few critical connoisseurs, they were but little cared for in England; but encouraged by the example and advice of my dear friends, Mr. George S. Nicholson, and Sir Charles Price, now both departed, I gradually acquired a number of specimens, chiefly selected for their artistic and decorative character.

As the collection increased in size it became desirable to obtain illustrations of the many curious processes of manufacture and ornamentation to which glass has been subjected, and likewise to add to the series specimens of various ages and countries. This led to its extension far beyond what I originally contemplated.

The result of my efforts to illustrate this elegant branch of art is now before my friends, and it will be for them to determine how far I have succeeded in the object which I had in view.

One of the greatest pleasures, however, to the possessor of beautiful or curious objects is to be able to show or describe them to friends who can appreciate such things; and this has led me to undertake a work far more extensive and costly than I had at first intended, but of which the illustrations will draw attention to some of the subtilties of form and design which no words can describe.

The great want of a work on the subject of Glass will, I trust, induce those into whose hands this book may come to deal tenderly with any imperfections either in the text or illustrations.

I should state that the Catalogue was in the first instance drawn up for me by Mr. W. Chaffers; it has since been much added to, and indeed nearly rewritten, by Mr. W. A. Nicholls, who has also superintended the illustrations; the coloured plates have been executed chiefly by Mr. Mellish, and the woodcuts by Messrs. J. and G. P. Nicholls.

My friend, Mr. Nesbitt, has kindly contributed the dissertation on the History of Glass, which forms the Introduction, and which will not, I trust, be found one of the least valuable portions of the work. I am indebted to another friend, Mr. A. W. Franks, for much information as well as for having revised a considerable portion of the text. I must not also forget to express my thanks to Mr. Edward Blore and other friends for their valuable suggestions and artistic criticisms.

I will only add that it would be a matter of regret to me if a collection,

rescued, as it were, piece by piece, from the every-day chances of destruction, were liable, at a future time, to be dispersed, or subjected once more to the perils which its nature involves: I have therefore announced my intention that it should find its ultimate resting place in the British Museum, where I trust that it may furnish pleasure and instruction to future generations.

FELIX SLADE.

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NOTES

ON

THE HISTORY OF GLASS-MAKING.

By ALEXANDER NESBITT, Esq., F.S.A.

It may be fairly said that in no department of manufacture have human skill and taste produced objects of greater beauty, as well as of greater utility, than in that of glass-making; in the combination of beauty and utility, with moderation of cost, glass manufactures are certainly unrivalled. That such is the case is due to the ease with which glass, when heated, can be manipulated into whatever form of grace the skilled artist may desire to produce, to its crystalline purity when colourless and transparent, to its capability of acquiring the most brilliant hues from the admixture of small quantities of metallic oxides, and to its retaining, when blown or cast, a perfectly smooth surface requiring no process of polishing.

These various qualities have made vessels and ornaments of glass the delight alike of the savage and of the man of the most refined taste, while the power of receiving colour, without loss of brilliancy, has given us, in the painted windows of mediæval churches, objects of almost unearthly splendour, and, in the form of mosaic, the noblest and most lasting means of internal decoration.

It cannot, then, be thought that time and expense are ill bestowed in bringing together a collection of choice examples of a manufacture which is so attractive, so important, so ancient, and so much connected with the personal and domestic, as well as with the æsthetic life of man. A description of such a collection, with representations of such of the specimens it contains as are most remarkable either for form or rarity, or as throwing light on the history of the art, must be welcome to all who know how much of the real history of man may be learnt by the study of the productions of former ages; and it will be acceptable to those who think that the sense of beauty is a gift which we do well to educate and refine, and that no object of daily use is too ordinary or too humble to be modified in accordance with its dictates.

How much the study of examples of the taste and skill with which the workmen of other times and other countries practised the art of glass-making, has benefited that art in our own time, may be estimated by any one who will compare the glass

vessels of twenty or thirty years ago with those produced by the best artificers of the present day. Much, however, may still be learnt from the productions of Rome in the earlier centuries of the Christian era, and from those of Venice in the 15th and 16th centuries, periods when this "ars tam nobilis,"* was practised in those cities with extraordinary taste, skill, ingenuity, and invention.

Of the collection now described it may be truly said, that while it contains specimens which prove and illustrate the existence of these qualities in the products of the two great periods in question, no pains have been spared to make it as complete and as historically instructive as possible. The writer may be permitted to add that it possesses a peculiar interest to those who enjoyed the friendship of two most amiable and accomplished men, whose premature loss will be a lasting source of sorrow to all who knew them, the late George Stewart Nicholson, and Sir Charles Rugge Price, for they both took the greatest interest in its formation, and both, but especially the former, gave the owner the assistance of a singularly refined and discriminative taste in the selection of suitable specimens.

The catalogue of the collection may be fitly preceded by a sketch of the history of the art, a subject which has been well treated of within a recent period, by M. Labarte† and by Mr. Franks,‡ and much of what follows will be found to be to be borrowed from their pages.

As glass-makers of different countries often followed almost identical processes of manufacture, and consequently obtained like results, it is not possible to assign every object with certainty to its place of origin, and the history of the art is, therefore, not susceptible of a strictly accurate division, either by periods or by countries. The division adopted will, however, it is hoped, be found of sufficient practical convenience.

This division is as follows:—

1.—Glass anterior to the Christian era (Catalogue, Part I., Section i.).
2.—Glass from the Christian era until A.D. 400 (Part I., Section ii.).
3.—Glass of Europe, from A.D. 400 until A.D. 1000 (Part II., Section i.).
4.—Glass of Byzantium and the Eastern Empire (Part II., Section ii.).
5.—Glass of that part of the East not subject to the Greek Emperors (Part II., Section iii.).
6.—Glass of Europe, from A.D. 1000 to A.D. 1300 (Part II., Section iv.).
7.—Glass of Venice, from A.D. 1300 to the fall of the Republic (Part II., Section v.).
8.—Glass in France, Germany, England, etc., from A.D. 1300 to 1750 (Part II., Sections vi.—ix.).

* So termed by the Venetian Senate in an edict, 15th March, 1383.

† In the introduction to the Catalogue of the Debruge Dumenil collection, and in *Histoire des Arts Industriels au Moyen Age*, Vol. iv.

‡ *Art Treasures of the Manchester Exhibition*, section Vitreous Art, and *Catalogue of Works of Art on Loan*, 1862, sect. 20.

The object of the writer has not been to furnish an industrial history of the art brought down to the present time, but merely to offer an outline from an historical and antiquarian point of view; he has not, therefore, attempted to give in the latter chapters a full account of the progress of the manufacture in Europe, but has confined himself to a few scattered notices, bearing more on the artistic than on the industrial aspect of the art.

1.—GLASS ANTERIOR TO THE CHRISTIAN ERA.

The art of glass-making was undoubtedly practised at a very early period; one so early that the true history of the invention of the art is no doubt lost to us, and we may adopt if we please the story told us by Pliny and by other ancient authors. These state that Phœnician merchants returning from Egypt to Syria with a cargo of natron or soda, when cooking on the sandy beach under Mount Carmel, rested their pots on blocks of natron, and that glass was produced in consequence of the heat of the fire causing the alkali to form a flux for the silicious sand.

However, as glass is produced accidentally in the course of some metallurgical operations, such as the smelting of certain ores; and as it is also formed when vegetable substances containing both silica and an alkali, such as reeds and straw, are burnt in large masses (an accident not at all unlikely to have occurred in Egypt), the original invention may be due to the acuteness of some one who noticed the fortuitous production of this remarkable substance.

As Mr. Franks has remarked (*Art Treasures of the Manchester Exhibition, Sect. "Vitreous Art"*), the legend told us by Pliny points both to the Phœnicians and to the Egyptians as connected with the early practice of glass-making, and it seems very possible that the art may have been invented in Egypt and carried thence to Phœnicia, where, as Pliny tells us, a small spot at the mouth of the river Belus furnished sand which had sufficed to produce glass for many centuries. As the Venetians appear to have imported this sand in later times, it is probable that it furnished the silicious element of glass of superior quality.

Egypt at all events supplies us with the earliest positive evidences of glass-making. Sir Gardner Wilkinson (*Popular Account of the Ancient Egyptians*, Vol. ii., p. 59) mentions that glass bottles containing red wine are represented on monuments of the fourth dynasty, more than 4000 years ago; and in the tombs at Beni Hassan, dating from the reign of Osirtasen the First, at least 2000 years B.C., the process of glass blowing is represented in an unmistakeable manner.* A glass bead,† published by Sir Gardner Wilkinson, bears the name of Hatasu, a queen

* See Wilkinson's *Manners and Customs of the Ancient Egyptians*, Vol. iii., p. 89.

† This bead is of a dusky green glass, quite transparent, and is stated to have the specific gravity of bottle glass. It has been suggested that the material is not artificial glass, but obsidian, which abounds in Egypt and is occasionally to be found of this tint.

conjectured to have reigned about 1450 B.C. The art of colouring glass was also invented at a very early period, for many coloured fragments are found in the tombs of Thebes, and a vitrified coating, usually blue or green, was given to objects formed of earthenware and even of stone or granite.

As the objects of glass of Egyptian fabrication rarely bear inscriptions, it is not easy to trace the progress of the art in that country, but as they are met with not unfrequently in tombs in Egypt, it is probable that the manufacture continued to flourish as well during the period of the native monarchy as in that of the Greek dynasty;* its importance after the subjugation of that country to Rome was probably even increased by the new market thus opened for its products. Martial alludes to this importation in the epigram (Book xii. 74)—

> Cum tibi Niliacus portet crystalla cataplus,
> Accipe de circo pocula Flaminio.

Hadrian in a letter addressed to the Consul Servianus, when enumerating the chief industrial occupations of the inhabitants of Alexandria, includes among them that of glass-blowing.†

The manufacture was not, however, confined to Alexandria, for we are told in the Periplus Maris Erythræi, that among the articles imported into various emporia on the Red Sea, were many sorts of glass and murrhine vases made at Diospolis.‡

The ordinance of Aurelian, that glass should form a part of the Egyptian tribute, shews that the manufacture in that country and the importation into Rome continued in the latter part of the third century.

That there was considerable similarity between the glass manufactures of Egypt and of Phœnicia, may be inferred, among other circumstances, from the accounts we have of immense statues and obelisks in both countries, said to be of emerald, but no doubt of green glass. Herodotus (Lib. ii., c. 44) tells us that he saw in the temple of Hercules at Tyre a statue or column of emerald; Pliny mentions, on the authority of Apion, a statue of Serapis thirteen feet and a half high in the Egyptian labyrinth, and, on the authority of Theophrastus, an obelisk sixty feet high, in the temple of Jupiter in Egypt, composed of four emeralds.§ It is probably not safe to assume that all glass objects found in Egyptian tombs were really made in Egypt, but many specimens found both there and elsewhere bear unmistakeable marks of the art of that country (for instance,‖ No. 14,

* A curious illustration of this is the account given by Strabo of the body of Alexander being placed in a sarcophagus of glass. Strabo, Lib. xvii., p. 795.

† "Alii vitrum conflant."

‡ Per. Mar. Erythr., c. 6. "λιθίας ὑαλῆς πλείονα γένη καὶ ἄλλης μορρίνης τῆς γινομένης ἐν Διοσπόλει" were among the importations into an emporium in the territory of Zoscales, perhaps Massowah. According to Dr. Vincent (*Commerce and Navigation of the Ancients*, Vol. ii., App., p. 730), this is not Thebes, but the lower Diospolis, in Lower Egypt, on Lake Mensaleh.

§ Pliny, Lib. xxxvii., c. 5, § 19.

‖ For this, and every similar reference, see the Catalogue.

Plate I. *Fig.* 2), and this is equally true of the manufactures of the three or four centuries before, as of the three or four after Christ.

The plain Egyptian glass is of dusky green colour,* and shews little mark of disintegration, partly, no doubt, in consequence of the dryness of the climate.

The analyses made by Professor John, of Berlin, given by Von Minutoli *(Ueber die Anfertigung der farbigen Gläser bei den Alten, Berlin*, 1836, p. 35*)* shew that blue opaque glass found at Memphis owed its colour to copper; some other specimens of a like kind contained copper, with traces of iron; semi-transparent blue from Memphis was coloured by cobalt; violet also from Memphis with manganese; and black with iron; the semi-transparent blue also contained some lime. Sir Humphry Davy's examinations show like results; he found copper in Egyptian blue and green pastes, but he says that the transparent blue vessels found in Magna Græcia owed their colour to cobalt.†

What has been said above applies solely to glass undoubtedly of Egyptian origin. It would seem, however, that the same processes were employed in Phœnicia and Egypt some centuries before Christ, and in Phœnicia, Egypt, and Rome, for some centuries after. It will be more convenient, therefore, to speak of the processes common to the two former countries when treating of Phœnician, and of those common to all three when speaking of Roman glass.

Next in date to the earlier Egyptian examples mentioned above, would appear to be the vase of transparent greenish glass found in the north-west palace of Nineveh, and now in the British Museum. On one side of this is engraved a lion and a line of cuneiform characters, in which is the name of Sargon, King of Assyria, B.C. 722. Fragments of coloured glasses were also found there, but our materials are too scanty to enable us to form any decided opinion as to the extent to which the art was carried in Assyria. Many of the specimens discovered by Mr. Layard at Nineveh have all the appearance of being Roman, and were no doubt derived from the Roman Colony, Niniva Claudiopolis, which occupied the same site.

It seems probable that the earliest products of the industry of Phœnicia in the art of glass-making, are the coloured beads, such as Nos. 43 to 55, which have been found in almost all parts of Europe, in India, and other parts of Asia, and in Africa. The "aggry" beads so much valued by the Ashantees, and other natives of that part of Africa which lies near the Gold Coast, have probably the same origin. These coloured beads are usually of opaque glass; they exhibit great variety of colour and pattern, and very different degrees of skill in manipulation. Their wide dispersion may be referred with much probability to their having been objects of barter between the Phœnician merchants and the barbarous inhabitants of the various countries with which they traded. It is probable, however, that many of the specimens which exist in our museums date from times several

* See Wilkinson's *Manners and Customs of Ancient Egyptians*, Vol. iii., p. 89.

† See a paper by Professor Buckman, *Archæological Journal*, Vol. viii., p. 351.

centuries later than those in which Tyre and Sidon flourished; for, as we may learn from the Periplus and from Strabo, glass in various forms was an article imported in the 1st and 2nd centuries, as well into the emporia of the Red Sea, as into the ports of Britain.* Even at the present day, beads are made at Venice for export to Africa, which bear a resemblance, doubtless not accidental, to those which we have reason to believe to be of very early date. Professor Buckman has given in the Archæological Journal (Vol. viii., p. 351), an analysis of a bead found in an ancient British tumulus in Wiltshire; it was of a Prussian blue colour with white rings, and contained silica, potash, soda, alumina in small quantity, traces of lime and magnesia, oxide of iron, and oxide of copper.†

Many of the beautiful little vases found in tombs in the countries whose coasts are washed by the Mediterranean, and which are generally called Greek, are, there is good reason to think, the products of Phœnician industry. M. Labarte, indeed, considers it certain that manufactories of glass vessels were established, at a very remote period, in Sicily, the islands of the Archipelago, and Etruria. The close similarity, however, of the vessels of this class to each other, whether found in the Greek islands, in Egypt, or in Italy, would lead us rather to suppose that they were produced in a few contiguous cities than in many places widely separated from each other. In the latter case, the difference of materials within reach could scarcely fail to cause appreciable dissimilarity in the products, even if the makers were colonists of one and the same original stock.

The vases of this class (see Nos. 10 to 40) have usually the forms of either *alabastra* or *amphoræ;* the prevailing colour is a deep transparent blue, but not unfrequently the colour of the body of the vase is some shade of pale buff, fawn, or white (an imitation more or less exact of arragonite or Egyptian alabaster), sometimes deep green, and, in rare cases, red. In almost every example the surface is ornamented by bands of colour, white, yellow, or turquoise blue,‡ forming zigzag lines (*Plates* I. and II. represent specimens of this description of vases); in some there are only two or three such lines, and in others the whole surface is covered by them. These lines are incorporated with the surface of the vessel, but do not penetrate through its entire thickness. Examination of the interior will, in many cases, shew that it is rough and bears the appearance of having been moulded upon a core of sand; this, however, appears to be less clearly so when the example is of a characteristically Egyptian form and colouring, and has been found in Egypt. It is, however, difficult to find a sufficient number of fractured specimens to allow a decided opinion to be formed on this point.

* Glass wares are often mentioned in the Periplus Maris Erythræi, when the imports into emporia of the Red Sea are described. Strabo, when writing of the imports into Britain, mentions ὑαλᾶ σκεύη (Lib. iv., c. 5, § 3). His words are somewhat ambiguous, and it has been supposed that these articles of glass were exports from Britain, but it is much more probable that they were imports.

† On the subject of beads, see a memoir by J. Y. Akerman, in *Archæologia*, Vol. xxxiv., p. 46.

‡ Due, it would appear by Sir H. Davy's analysis, to cobalt (see ante, p. v.).

By far the greater number of the vessels of this class which are preserved in museums will be found to bear forms much more Greek than Egyptian, as that of the *œnochoe*, with a trefoil lip and a handle. No. 14 (*Plate* I., *Fig.* 2) of this collection, however, affords an example quite Egyptian in character, and in the British Museum are several specimens.

By the Greeks and Etruscans they were evidently much valued; the amphoræ have been occasionally found in tombs, furnished with a stand of gold, similar to that described under No. 10 (*Fig.* 6). In Rhodes and elsewhere they have been found associated with objects which make it probable that they do not date from an earlier period than the third or fourth century before Christ, and it does not appear that they are met with in tombs later than the Christian era; when coloured or ornamented glass vessels are discovered in these last, they are of a different character.

Glass, it would appear, was occasionally used for purposes of architectural decoration during the best period of Grecian art, for Stuart and Revett, when describing the temple of Minerva Polias at Athens, give the following note*:— "A remarkable singularity observed in the capitals of this portico is in the plaited torus between the volutes having been inlaid at the interstices with coloured stones or glass." Mr. H. March Phillips informed the writer, when calling his attention to this passage, that he well remembers having remarked these decorations, and that he believes them to be of blue glass.

2.—GLASS FROM THE CHRISTIAN ERA UNTIL A.D. 400.

The increasing wealth and luxury of Rome which accompanied the establishment of the empire, had among their more important effects that of stimulating the manufacture of glass, and this ultimately reached a point of development which in some respects has never been excelled nor even perhaps equalled. It may appear a somewhat exaggerated assertion that glass was used for more purposes, and in one sense more extensively by the Romans of the imperial period than by ourselves in the present day, but it is one which can be borne out by evidence. It is true that the use of glass for windows was only gradually extending itself at the time when Roman civilization sank under the torrent of German and Hunnish barbarism, and that the use of glass for optical instruments was, if known at all, only known in its rudimentary stage; but for domestic purposes, for architectural decoration, and for personal ornaments, glass was unquestionably much more used than at the present day.

That glass was highly and deservedly esteemed as a material of what we should now call works of *vertu*, is evidenced by the immense prices paid for fine

* *Antiquities of Athens*, Vol. ii. p. 73, note *a*.

examples (for instance, the 6000 sestertii which Pliny tells us were paid in the time of Nero for two small vases,*) and also by the interest several emperors took in the products of the manufacture, among whom we may specially notice Tacitus, a man of letters and a collector, of whom Vopiscus tells us that "vitreorum operositate atque diversitate vehementer est delectatus." † The Portland vase in the British Museum and the vase in the Museo Borbonico at Naples, to mention one kind of glass manufacture alone, shew us how well deserved was the admiration which was bestowed upon such objects by the dilettanti of Rome.

These and similar vessels, sculptured like cameos, are perhaps the most beautiful objects which the glass-makers of those times produced, but many vessels of plain glass, or of glass of only one colour, show the greatest elegance of form, as No. 211, represented by *Fig.* 50; and the ingenuity and invention which devised so many modes of ornamentation and so many shades of colour, and the skill with which the manual execution is carried out, alike deserve great admiration, and may be estimated by referring to *Plates* III. and IV. This prodigious variety seems to show that glass-making was at that time carried on, not as now in large establishments, which produce great quantities of articles identical in form and pattern, but by many artificers, each working on a small scale. This circumstance enables us to understand why very pure and crystalline glass was, as Pliny tells us, more valued than any other kind. To produce glass very pure and free from striæ and bubbles, long continued fusion in large vessels is required; this the system of working of the ancients did not allow, and their glass is in consequence remarkable for the great abundance of bubbles and defects which it contains.

Glass was used at Rome in prodigious quantities; even now, after the lapse of some 1,300 or 1,400 years, the abundance of fragments of coloured glass (to say nothing of uncoloured) which are found in and round the city is surprising; the writer, during about four months of a residence in Rome in the winter of 1858-1859, saw in the hands of the dealers in antiquities fragments of at least 1,000 to 1,200 vessels of coloured and ornamented glass, for the most part, the crop, so to speak, of that season. Among these were fragments of at least ten or twelve vessels with white figures in relief on a blue ground, of the same kind as the Portland vase, and in this collection are specimens of a like character.

It is not, however, surprising that coloured and ornamental glass should have been very largely used among the Romans for all those domestic purposes in which a decorative effect is desired, such as table services, vessels for toilet use, and the like, when it is remembered that porcelain was not then invented and that Samian ware was the most decorative kind of pottery which was at their command. The brilliancy of glass as regards both surface and colour, made it attractive, and fashion caused it to be preferred even to the precious metals,‡ excepting indeed by the

* Neronis principatu reperta vitri arte, quæ modicos calices duos, quos appellabant pterotos, HS. sex millibus venderet. Plin. Nat. Hist., Lib. xxxvi. cap. 26.

† Vopiscus, in vitâ Taciti.

‡ Usus vero ad potandum argenti metalla et auri pepulit. Plin. Nat. Hist., Lib. xxxvi. c. 26, § 67.

Emperor Gallienus, of whom Trebellius Pollio observes as a remarkable circumstance, that he drank from golden cups, despising glass, than which, he said, nothing was more vulgar.*

As has been said above, the invention and ingenuity employed by the Roman artisans in producing variety in glass vessels are most remarkable; almost every means of decoration appears to have been tried, and many methods of manipulating glass, which have been considered inventions, have in reality been anticipated by the glass-workers of the period under consideration. It seems probable that many of the ingenious processes of the Venetian glass-makers were suggested to them by the examination of ancient examples.

In order to appreciate fully the skill of the glass-makers of the Imperial period, it is necessary to study not only the entire vessels which have been preserved, but also the fragments which, as has been stated above, are found so abundantly in the ruins of Roman cities. Entire vessels of an ornamental character are comparatively rare, for though urns of common uncoloured glass are frequently met with as receptacles of the ashes of the dead, it was not usual to place precious vessels in sepulchres at this period; some few, however, have been thus preserved to us, one instance being the Portland vase deposited in the sarcophagus of Alexander Severus. A certain number of ornamental vases have been found at Pompeii and Herculaneum, and a very few, after centuries of wreck and devastation, have survived here in the treasury of some church or convent.

According to Pliny,† glass was originally made from sand and natron alone; but afterwards the "magnes lapis," probably manganese,‡ was added, and then many kinds of shining pebbles, "calculi splendentes," shells, and various sands dug up from the earth, "fossiles arenæ." In India, he says, crystal was employed, and hence that no glass was to be compared with the Indian. During the melting "cyprium" was added, and "nitrum," especially the "Ophirium." By the former copper is generally to be understood, but chalk or some other mineral obtained in Cyprus may be here intended. What is meant by "Ophirium" is not certainly known, but it may indicate a kind of nitre brought from Ophir. Such, he says, was the "antiqua ratio vitri," and he seems to imply that at Sidon glass was made in this manner. In his own time, a fine white sand was found on the shore between Cumæ and Liternum, which was pulverised, mixed with three parts of "nitrum," and twice melted. It was then called "ammonitrum," which being again melted became "Vitrum purum ac massa vitri candidi." He adds, that in Gaul and in Spain sand was similarly treated. The lumps of glass so obtained apparently were brought to Rome and there mixed with the colouring ingredients and re-melted.

A passage in Strabo's Geography (Lib. xvi., c. 2, § 25) is worth notice with reference to the practice of glass-making at Rome; he says, that he had heard from

* "Nihil esset eo communius." Treb. Pollio, in vitâ Gallieni.
† Plin. Nat. Hist., Lib. xxxvi., c. 26, § 65.
‡ See Beckman's *Hist. of Inventions*, Vol. iv., p. 59.

the glass-makers at Alexandria, that a certain earth was found in Egypt without which the more elaborate and many-coloured wares could not be made; and it was said that at Rome many things were to be procured which facilitated both the colouring and the working, and the giving it a crystalline appearance; insomuch that a cup might be bought there for a small piece of copper money.

The coloured and variegated glass and glass vessels made in Rome seem to have been articles much exported; for fragments have been found at Cimiez near Nice, at Nismes, and in London, of shades and mixtures of colours, and of patterns so precisely the same as those found at Rome, as to render it almost certain that they were all made at one and the same place. We may see from Pliny's notice of glass that many varieties were produced in his time; he tells us of an opaque red (totum rubens vitrum atque non translucens, hæmatinum appellatum), of white glass, and of glass imitating murrhine, jacinths, sapphires, and all other colours (album et murrhina, aut hyacinthos sapphirosque imitatum, et omnibus aliis coloribus). He also makes special mention of black glass, like obsidian, which was used for vessels on which to serve food, (fit et tincturæ genere obsidianum ad escaria vasa).

Of all these kinds examples may be seen in this collection, with the possible exception of the murrhine. The question as to what the real murrhine was, has often engaged the pens of classical scholars, but has never been satisfactorily solved. Some light may perhaps be obtained by comparing the description, which Pliny gives, with specimens of ancient glass among which we might fairly expect to discover the imitation murrhine. Pliny tells us that the colours of the real murrhine were purple, white, and a third "ex utroque, ignescente veluti per transitum coloris purpura aut rubescente lacteo."* Now among the fragments of glass found at Rome and elsewhere, specimens are occasionally to be met with of a very beautiful transparent purple, mixed with veins and lines of opaque white; where this white has a thin covering of the purple glass, a colour is seen which corresponds with Pliny's description.† It has been thought that by murrhine the ancients meant fluor spar, but no glass has been noticed which resembles this substance. The kind of glass, however, which Pliny speaks of as most highly esteemed in his time was the pure white, imitating crystal; this it may have done, not only in colour and transparency, but also in form (see Nos. 170, 171 and 219). Pliny says, "Maximus honos in candido translucentibus quam proxima crystalli similitudine" (Lib. xxxvi., c. 26).

The Romans had at their command, of transparent colours, blue, green, purple or amethystine, amber, brown, and rose colour; of opaque colours, white, black, red,

* Plin. Nat. Hist., Lib. xxxvii. c. 2.

† The most probable opinion seems to be that the real murrhine was a variety of agate (see King's *History of Precious Stones and Gems*, p. 239), containing shades of red or purple. It is possible that those red or purple shades were produced by heat, or other artificial means, as is practised so largely at the present day in Germany, both with onyxes and crystals, and this may explain the line in Propertius, Book iv., c. 5, v. 26—

"Murreaque in Parthis pocula cocta focis."

blue, yellow, green, and orange. There are many shades of the former as well as of the latter, particularly of transparent blue, and of opaque blue, yellow, and green. Of opaque colours many varieties appear to be due to the mixture of one colour with another. In any large collection of fragments, it would be easy to find eight or ten varieties of opaque blue, ranging from lapis lazuli to turquoise or to lavender, and six or seven of opaque green. Of red the varieties are fewer; the finest is a crimson red of very beautiful shade, and there are various gradations from this to a dull brick red. One variety forms the ground of a very good imitation of porphyry, and there is a dull semi-transparent red which, when light is passed through it, appears to be of a dull green hue.

The analyses of antique glass of this period, given by Von Minutoli (p. 31), which were made by Klaproth, show the following results:—

Opaque Red from the Villa of Tiberius at Capri.

In 200 grains, Silica	142	grains.
Oxide of Lead	28	,,
Do. Copper	15	,,
Do. Iron	5	,,
Alumina	2	,,
Lime	3	,,
	195	,,

Opaque Green.

In 200 grains, Silica	130	grains.
Oxide of Copper	20	,,
Do. Lead	15	,,
Do. Iron	7	,,
Lime	13	,,
Alumina	11	,,
	196	,,

Partially transparent Blue from Capri.

In 200 grains, Silica	163	grains.
Oxide of Iron	19	,,
Alumina	3	,,
Oxide of Copper	1	,,
Lime	0.5	,,
	186.5	,,

Another specimen of blue Roman glass, analysed by Professor John, shewed the presence of cobalt.

It has been ascertained that the rose-coloured glass owes its colour to gold, the violet to manganese, the white and orange to oxides of tin and of arsenic. A specimen of fine opaque red lately analysed in London proves to be coloured by iron.

With these colours the Roman *vitrarius* worked, blending them in almost every conceivable combination, sometimes, it must be owned, with a rather gaudy and inharmonious effect.

These combinations of colour were effected in two ways: first, by glasses of

two or more colours being combined so as to traverse the entire substance of the object; and, secondly, by the superposition of the one colour on the other.

To the former class belong all those termed mosaic and mille fiori, where the process of manufacture was the preliminary union, by heat, of threads of glass into a rod, which when cut transversely exhibited the same pattern in every section. Such rods were often placed together side by side, and again fused. This process was no doubt first practised in Egypt, and is never seen in such perfection as in objects of a decidedly Egyptian character in design or in colour, such as Nos. 95, etc. Very beautiful pieces of ornament of an architectural character are met with, which probably once served as decorations of caskets or other small pieces of furniture, or of trinkets; also tragic masks, human faces, and birds. Some of the last-named are represented with such truth of colouring and delicacy of detail, that even the separate feathers of the wings and tail are well distinguished, although the piece which contains the figure may not exceed three-fourths of an inch in its largest dimension.* These observations will be understood by referring to Nos. 90 to 104, and to *Plate* IV.

The patterns were made first on a large scale; then the glass rod, when hot, was drawn out until its diameter was reduced to the size we see. That such was the case is evident from a careful examination of some of the pieces, as the work is evidently more minute than human powers otherwise could accomplish: *e.g.*, in No. 93, where are represented a small human bust and head, with a lock of hair hanging over the forehead; this lock is not much broader than a horsehair, yet, when examined with a powerful lens, it is seen to be composed of nine threads alternately of transparent and opaque glass.

Although, as before noted, the finest works of this description were made by Egyptian craftsmen, many of those found at Rome were probably made there, and fragments of the rods are occasionally discovered; one of these, in the possession of the writer, is quadrilateral, about $\frac{3}{4}$-inch square, and shews a four-leaved flower of turquoise blue, with a yellow centre, on a ground of opaque red.

The same process was used in the manufacture of objects much larger than those mentioned above, and plates 4 to 6 inches square are met with; the execution of these is much less minute and delicate; the subjects usually found on them are flowers, particularly poppies, ears of corn, and the like.

A very few examples have been noticed of a process of the same nature, but somewhat differently managed; in this the figure does not penetrate through the entire substance of the vessel, but is inlaid in a cavity hollowed out to receive it to the depth of about $\frac{1}{16}$ of an inch. The only specimens which have been met with represent fishes on a ground of opaque turquoise blue†; one specimen has the head and about half the body of a fish, which if entire would measure 3 to $3\frac{1}{2}$ inches in length. It is executed with the greatest minuteness; the teeth, the

* An exquisite specimen, a figure of a human-headed hawk, is in the British Museum. It came from the Townley Collection, and formerly belonged to the Duchess of Portland.

† For specimens of this kind, see Buonarrotti, *Osservazioni sopra alcuni Medaglioni Antichi*, p. xvii.

divisions of the fins, and those of the eyeball and eye, being represented with great truth both of form and colour.* These figures might have been executed in two ways, either by making a rod or cane of the required form and cutting off transverse sections, which being placed in the cavities prepared for them, were fixed by the action of the furnace; or, the cavity may have been prepared, the various colours placed in their proper situations in the condition of powder worked into a stiff paste with some suitable vehicle, and an amount of heat applied sufficient to unite them and cause them to blend, without producing liquefaction.

A common variety of mosaic glass is that which was made by combining square sticks of various colours, the effect produced being that of tesselated work (see *Plate* IV., *Fig.* 9). Small cups were made of this pattern, but only in very rare cases of the more artistic patterns.

In the Louvre is a mass of this tesselated pattern, which, being rounded at one end, seems to shew that the sticks of which it is composed were placed together in a small pot and there heated until they cohered.

A vast quantity of small cups and pateras were made by the same means in patterns which bear considerable resemblance to the surfaces of madrepores (see Nos. 86, 87, and 89), and are of the same kind as those which by the Venetians are termed "mille fiori." In these, every colour, and every shade of colour, seem to have been tried in great variety of combination with effects more or less pleasing (see *Plate* IV., *Figs.* 10 and 11); but transparent violet or purple appears to have been the most common ground colour. Although most of the vessels of this mille fiori glass were small, some were made of large size; a fragment in the possession of the writer must have formed part of a dish not less than 20 inches in diameter.

Another variety of glass, evidently much used, is that in which transparent brown glass is so mixed with opaque white and blue as to resemble onyx. This was sometimes done with great success, and very perfect imitations of the natural stone were produced; *Plate* III., *Fig.* 1 furnishes a kindred example. What has been noticed above as possibly imitation murrhine (p. x.,) is a variety of this kind, in which purple or violet glass takes the place of brown.

Imitations of porphyry, of serpentine, and of granite, are also met with; but the use of these seems to have been confined to pavements, and the decoration of walls, for which purposes the onyx-glass was likewise employed. See Nos. 105, 106.

Under this head must also be included the interlacing of bands and threads both of white and of coloured glass. Vessels are found composed either of bands placed so in sections as to represent a plaited pattern, or simply arranged side by side; others, again, resemble the Venetian vitro di trina, threads of opaque white or yellow glass being twisted with clear transparent glass, and the vessel then formed by the welding together of the rods so made; (see, for instance, *Fig.* 25, and *Plate* III., *Fig.* 2). Blue threads are occasionally intermixed, and several varieties

* This example was seen by the writer at Rome, in 1859. It was then in the possession of a Belgian artist, named Brüls.

of pattern may be found; but this branch of the art does not appear to have been carried by the Romans to anything like the perfection to which it was afterwards brought by the Venetians.

Pieces of gold leaf are sometimes introduced between the layers of glass, and these are frequently seen combined with the bands of colour which have just been mentioned; (see Nos. 75, 76, also *Plate* II., *Fig.* 1, and *Plate* III., *Fig.* 3).

To the second branch of decoration by colour, viz., that by superposition, belong, in the first place, the cameo glasses, such as the famous Portland vase, in which a paste of one colour has been placed over another, and then carved into the required design; this no doubt is what Pliny meant to describe when he says "aliud argenti modo cœlatur." The sculpturing was no doubt mainly executed by the lapidary's wheel, but the work may have been finished with the help of a diamond, or by attrition with a file composed of emery or adamantine spar, formed into a mass with pitch or some other resinous substance, like the corundum file of the present day. Pliny, it would seem, wished to distinguish between that which was merely mechanical work executed by a wheel, and that which required the manipulation of the skilled artist, for he says "aliud torno teritur, aliud argenti modo cœlatur"—the first being what we should call cut glass, the second the cameo glass described above.* Roman silver, it may be observed, was often ornamented by the same method, and not always beaten out from behind.

The few entire vases of this kind which have been preserved, are remarkable for their exquisite beauty, and the existing fragments usually exhibit traces of good style. Though the Portland vase was found in the sepulchre of Alexander Severus, yet, like the elegant amphora in the Museo Borbonico at Naples, and the Auldjo vase in the British Museum, it shews marks of Greek rather than of Roman art. They all seem to belong to a comparatively early date.

The ground of these cameo glasses is most commonly transparent blue, (often lined with opaque white to throw up the colour), but sometimes opaque blue, purple, or dark brown. The superimposed layer which is sculptured is generally opaque white. A very few specimens have been met with in which several colours are employed;† (see No. 133).

At a long interval after these beautiful objects come those vessels which were ornamented either by means of coarse threads trailed over their surfaces and forming rude patterns, such as *Figs.* 51 and 60, or by coloured enamels merely placed on them in lumps, and these, doubtless, were cheap and common wares. But a modification of the first-named process was in use in the fourth and succeeding centuries, shewing great ingenuity and manual dexterity — that, namely, in which the added portions of glass are united to the body of the cup, not throughout, but only at points, and then shaped either by the wheel or by the hand. The attached portions form in some instances inscriptions, as

* Apuleius, *Met.* ii. 33, uses the expression, "vitrum affabre sigillatum."

† See a remarkable specimen in Apsley Pellatt, *Plate* V., Fig. 1, composed of five layers.

on a cup found at Strasburg, which bears the name of the Emperor Maximianus (A.D. 286-310); on another in the Vereinigte Sammlungen at Munich; and on a third, in the Trivulzi Collection at Milan, where the cup is white, the inscription green, and the network blue.* Probably, however, the finest example is a situla, $10\frac{1}{2}$ inches high, by 8 wide at the top and 4 at the bottom, preserved in the treasury of St. Mark, at Venice. This is of glass of a greenish hue; on the upper part is represented, in relief, the chase of a lion by two men on horseback accompanied by dogs; the costume appears to be rather Byzantine than Roman, and the style very bad. The figures are very much undercut. The lower part has four rows of circles united to the vessel at those points alone where the circles touch each other. All the other examples have the lower portion covered, in like manner, by a network of circles standing nearly $\frac{1}{4}$ of an inch from the body of the cup.

An example connected with the specimens just described, is the cup belonging to Baron Lionel de Rothschild; though externally of an opaque greenish colour, it is by transmitted light of a deep red, the colouring matter, Mr. Franks observes, being probably copper, but the glass has not been brought to the state in which it becomes ruby. On the outside, in very high relief, are figures of Bacchus with vines and panthers, some portions being hollow from within, others fixed on the exterior. The changeability of colour may remind us of the "calices versicolores," which Hadrian sent to Servianus. This and the preceding ought, according to the system of classification which has been adopted, to have been noticed with vessels owing their decoration to form and not to colour, but it seems scarcely advisable to attempt a strictly accurate classification.

Vessels are also found on which coloured enamels have been dashed in spots entering slightly within the surface (No. 238, *Fig.* 54); these are but common and ordinary objects exhibiting little or no art, still they seem to have some bearing upon the interesting question whether enamel painting upon glass was practised by the Romans. The above-mentioned is a coarse and imperfect sort of enamelling, though it was probably executed by means of enamel liquefied by heat and not reduced to a fine powder and applied cold, the only means by which delicate execution could be obtained. It is, however, unlikely that when so near an approach had been made to the art of enamelling, the last step was not taken by artists so ingenious and so desirous of novelty as were the Roman, and several objects are extant or have been described, which bear traces of the process. One specimen is in this collection, No. 84, on which is a figure of a gryphon, drawn apparently in a dark enamel colour. In the Louvre is a small cup of green transparent glass, about 3 inches in diameter, said to have been found at Nismes; on this figures of animals and foliage drawn in yellow and red are discernible. Von Minutoli (p. 16) states that Canon Gorio, at Naples, shewed him a sketch of a patera which was found in the year 1819, at Cumæ, on which a landscape was painted in

* Engraved in Winkelmann, *Storia delle Arti*, i., p. 42. A fragment of a cup of this kind is in the British Museum.

several colours with decorations in gold. This should now be in the imperial collection at Vienna. Boldetti (p. 189) states that in the cemetery of Callistus, in the catacombs, a cup was found, in the bottom of which the head of our Saviour was depicted, not in gold but in several colours. It is not at all surprising that few enamel paintings have been preserved, when it is remembered that almost all Roman glass is found buried in damp places, and much corroded on the surface, and that enamel colours corrode more readily than ordinary glass on account of their containing a greater proportion of metallic oxides.

Decisive examples, however, are two cups found at Vaspelev, in Denmark, engravings of which are published in the *Annaler for Nordisk Oldkyndeghed* for 1861, p. 305. These are small cups, 3 and $2\frac{1}{2}$ inches high, $3\frac{3}{4}$ and 3 inches wide, with feet and straight sides; on the larger are a lion and a bull, on the lesser two birds with grapes, and on each some smaller ornaments. On the latter are the letters DVB . R. The colours are vitrified and slightly in relief; green, blue, and brown may be distinguished. They were found with Roman bronze vessels and other articles.

In the fourth and following centuries, pictorial representations were made by means of gold leaf, either embedded in the substance of the glass or fixed to its surface. Some hundreds of these have come down to us, in consequence of the Christians of those times having been in the habit of affixing the disks, which formed the bottoms of the vessels thus ornamented, to the exterior of the *loculi* in which the dead were placed in the catacombs. They offer a series of most curious and interesting representations, and have been well illustrated by Padre Garrucci in his work entitled *Vetri Ornati di Figure in Oro (Roma*, 1858*)*. Padre Garrucci is disposed to attribute them to the period between A.D. 200 and A.D. 400, but without strictly confining them within those limits.

The subjects are sometimes mythological, but most commonly Christian; on the latter the inscriptions BIBE VIVAS and PIE ZESES very generally occur, and it has been inferred from them that the vessels were used either for sacramental purposes, or in the celebration of agapes. When found entire, which is rarely the case, the vessels are in the form of shallow pateras or bowls.

The process of making them seems to have been various: in some, like the fragment No. 121, a leaf of gold was fixed on the upper surface of the bottom of a vessel, the superfluous portions being removed, and lines traced through it until the desired pattern was obtained; the bowl was then superadded, and the whole united into one mass by fire. In a few instances, small portions of the ornaments or figures have colour added; red, lake, blue, white, and two shades of green, were thus employed; of this No. 317 is an important example.

Some of the vessels were decorated with small medallions, each of which forms a portion only of the subject represented, so that several were required to complete the design. In these the gold design is usually backed with coloured glass, either blue, green, violet, or crimson. The remains of a shallow dish found near Cologne (published in the *Jahrbücher des Vereins von Alterthumsfreunden*

in Rheinlande, Heft xxxvi., taf. 3), shews such an arrangement; of the small coloured medallions with which this was studded about twelve remain.

In other specimens, such as the fragment No. 120, and the remarkable disk from Cologne (No. 317), the gold leaf seems to have been applied to the surface of the glass, and not protected by a second coating. Such specimens must have been, however, peculiarly liable to injury. Enamelled decoration was also occasionally added, as in the case of No. 317.

The processes which remain to be mentioned are those in which decorative effect was obtained by variety of form, and these are the two which Pliny has indicated in the words "aliud flatu figuratur," and "aliud torno teritur," the first including blowing and moulding, the last grinding and shaping on the wheel.

Cameo glass and that later kind in which portions are only attached to the ground at points, ought, in strictness, to have been spoken of under this head, but reasons of convenience have led to the arrangement adopted.

Variety of form was given by several processes connected with that of blowing, for instance, by moulding with pincers or other tools, by forming projecting ribs on the sides (now called pillar moulding), as well as by the use of moulds, probably of metal, into which the glass was either blown or pressed. Many beautiful examples of these processes will be found in this collection; among those blown into moulds were bunches of grapes, dates, and human heads, of various colours (see *Plates* V. and VI., also Section C. Roman Glass). Masks and ornaments were likewise often made in a mould and attached to vases, etc.; and one maker has recorded his name and abode, ARTAS SIDON, both in Greek and in Latin, the words appearing in relief on the handles of cups, as if formed by the use of pincers on which they had been engraved; (see No. 199, and *Fig.* 47).

An elegant long-necked bottle, in the British Museum, seems to have been blown within a cage of wire; this process has given to its surface the little rounded elevations we see in the glass, which is now so common, and often called "kinkled."

A great number of vessels of various forms, whether cups, pateræ, or vases, were, after they were blown, finished by the wheel, and afford beautiful examples of skill in manipulation, portions being often much undercut. The artisans known as *diatretarii* probably executed this work.*

The whole surface was also sometimes cut, not as in modern times into projecting pyramids, but into a series of indentations of a curvilinear form, as *Figs.* 37 and 38. In another class of examples, figures and ornaments were engraved in shallow intaglio; this was evidently done with the lapidary's wheel, and in a few instances (*e.g.*, a cup in the Museum at Cologne) details were added with the point of a diamond or other hard stone. Work of this kind is usually bad both in style and in execution, and evidently belongs to a late date (see No. 169); a fragment

* They are mentioned in the Codex (Lib. x. tit. 64) in the ordinance of Constantine II., A.D. 337. *Diatretum* occurs in the Digest of Ulpian. See Facciolati, *sub voce*.

of a large patera or shallow bowl in the Vereinigte Sammlungen at Munich has engraved on it the labarum and the letters Alpha and Omega; but perhaps the most important specimen extant is a situla of dark violet glass in the treasury of St. Mark, at Venice, on which a bacchanalian dance is represented. The manufacture of such specimens was probably continued under the Byzantine Empire; see *Figs.* 74, 75, and No. 321, in which however the intaglio work is deeply cut.

Glass was also much used at Rome in the manufacture of artificial gems; and the story of the jeweller who cheated the Empress Salonina, wife of Gallienus, with some false gems, shews to what perfection the art of imitation was brought. Imitations of emeralds, beryls, and other gems are frequently found.

Copies in glass of intaglios and cameos are also met with in great quantity; many hundreds may even now be purchased at Rome, and they are found wherever any considerable Roman town existed. As they were apparently made for those whose means did not enable them to purchase works in real stones, both were probably produced, not by engraving, but by pressure in a mould when the material was in a state of semifusion, in the manner formerly practised with so much success by Tassie; the cameos, however, were often finished with the wheel. The intaglios, doubtless, were chiefly intended to be set in rings, although some of them are too large for such a purpose. Notwithstanding, however, the great number of specimens that have come down to us, there are but few of first-rate excellence as works of art; the latter, having evidently been cast from the finest gems of their time, have preserved to us designs of the greatest beauty with such conditions of unquestionable authenticity as render them of great value to the student of ancient art. Some beautiful specimens will be found in this collection (Nos. 154—166); and one (No. 157), obviously cast from a gem of the best period of the art, is as fine, perhaps, as any specimen known to exist.

Cameos of glass are sometimes met with of large size; a fine fragment in the British Museum in blue opaque paste, imitating lapis lazuli, has the upper half of a human figure, which, if perfect, would be about a foot high, and even larger examples have been noticed.* Besides human and animal figures, foliage and architectural ornaments are found on them, executed not unusually in glass of vividly contrasting colours, such as green and bright red; many of these no doubt served as ornaments for pieces of furniture, or for walls of rooms; (see *Figs.* 31, 32).

Circular medallions with a head of Medusa in cameo on each, and of nearly two inches in diameter, are not uncommon (see *Fig.* 30); it has been conjectured, with great probability, that these and other medallions of a like kind, were worn as *phaleræ* or military decorations by soldiers, or on the trappings of horses.†

One peculiar method of employing glass in the manufacture of personal ornaments requires special mention: that, namely, in which the surface was hollowed in

* See Winkelmann, *Storia delle Arti*, ed. Fed., i., p. 40.

† See *Archæologia*, Vol. xxxix. Pl. xxiv., fig. 1. In *Mus. Veronense*, p. 121, is engraved a sepulchral stone on which is an effigy of a centurion, furnishing an excellent instance of the manner in which the phaleræ were worn.

the form of a bird, a leaf, a lizard, or the like, and a very fine fillet of gold made to follow the outline and to mark out the features and members of the object represented; enamels of various colours were then inserted between the lines of gold, and the whole submitted to the action of the muffle furnace. These are sometimes executed with the most exquisite delicacy, as for instance the leaf, No. 77, *Plate* III., *Fig.* 4.* The ground is almost always blue transparent glass, backed with opaque white to throw up the colour. In a few instances there is no enamel, but the whole of the incavo is filled with gold, as No. 78, *Plate* III., *Fig.* 5. The specimens in which enamel is used are peculiarly interesting, as furnishing early examples of that process of enamelling which we are accustomed to call cloisonné, and which was practised with so much success in Byzantium in the eleventh and twelfth centuries.

Many other small articles were made of glass, as spoons (No. 298), hair pins (Nos. 118, 119, 288), children's toys in the form of animals and birds (*Fig.* 70), dice (No. 295), knuckle-bones, and counters.

Glass also played a very important part in the decoration of a sumptuous Roman house; thick pieces of coloured glass added to the brilliancy of the pavement, either in irregular fragments, or in larger slabs, so shaped as to form parts of a pattern.† Of the first method of using it a good example may be seen in one of the chambers of the house of the Faun at Pompeii, where many fragments of amethystine and of opaque red glass of the most beautiful tint are embedded in the pavement, in conjunction with small pieces of variously coloured marbles fixed in a hard cement, in the manner now called in Italy "alla Veneziana." Of the second kind of pavement, called "sectile," an example formed almost entirely of slabs of glass is represented in Pl. 1, fig. 4, of Von Minutoli's work; the colours of the glass were white, green, and blue; it was found in the course of excavations made by the Duke de Blacas in the year 1820, not far from the portico of the temple of Venus at Rome, near the Coliseum. The room to which this pavement belonged appears to have formed part of a private house of earlier date than the temple which was built by Hadrian. Von Minutoli also mentions (p. 13), that at the Isola Farnese, nine miles from Rome, on the road to Viterbo, a pavement of slabs of green glass about the thickness of a tile was found. In the possession of the writer are some pieces of black, white, and orange opaque glass, which were found on the site of the palace of the Cæsars at Rome; they are about half an inch thick, and have been shaped so as to form parts of a pattern. The pieces used in pavements are not only of single colours but imitate porphyry, serpentine, and various granites. The walls of rooms were decorated in a like manner, and thousands of specimens have come into the hands of the Roman dealers in antiquities. These are much thinner (see No. 106) than the pavement glass, and usually of an opaque yellow colour; but two or three shades of

* A similar medallion was found in a Frankish cemetery near Dieppe. Roach Smith, *Collectanea Antiqua*, Vol. ii. Pl. xlix.

† "Tessellata et sectilia pavimenta." Suetonius, Lib. i. cap. 46.

green are also far from rare. These pieces are often of very singular shapes, and it will be frequently seen that when placed together in pairs they form something like the petals of a flower (see No. 106). A few specimens, found at Pompeii or Herculaneum and preserved in the Museum at Naples, produce the kind of patterns thus displayed; some are star-like, others rosettes, and each one is placed in the centre of an octagonal piece of lavender-coloured opaque glass. One of the stars is made of eight pieces of so-called mosaic glass, all cut from the same rod, which indicates that this kind of glass was less costly than we might be inclined to suppose. As, however, these wall pieces were generally cut with a wheel, so as to fit exactly, the Romans must have spent upon these decorations an amount which to us, accustomed to ornament our walls with paper or plaster, would appear surprising. Such decorations are, however, alluded to by ancient authors in terms denoting that they were considered as marks of great luxury; as Vopiscus (*in vitâ Firmi*, cap. 3) tells us of Firmus, "De hujus divitiis multa dicuntur, nam et vitreis quadraturis, bitumine aliisque medicamentis insertis, domum induxisse perhibetur." Seneca (Ep. 86) contrasts the vaults of the bath chambers of his own day covered with glass,* with the rude simplicity which marked the times of the Scipios.

Another variety of this system of decorating walls, in which higher artistic powers were called into use, was that in which not merely patterns, but subjects containing forms both of animals and men, were represented by means of coloured marbles and glass; very few examples of this description of work have come down to us; by far the most important formed part of the decorations of the basilica Siciniana, afterwards the church of S. Andrea in Catabarbara, and now destroyed. Ciampini (*Vet. Mon.* vol. i., pl. 21—24) has represented the building and several portions of the decorations as they existed in his time; and Von Minutoli (pl. 4) has given a coloured engraving of a fragment, which was then preserved in the Palazzo Albani at Rome. This is about 4 ft. 4 in. (Rhenish measure) high, by about 4 ft. wide; in the upper part the story of Hylas seized by the water nymphs is depicted, while the lower is occupied by a piece of drapery represented as if suspended to the wall. The upper part is chiefly composed of pieces of variously coloured marbles, some portions only being of blue and green glass; in the lower part glass is more freely used. The piece of drapery has a broad border on which are small figures of Egyptian deities and priests; these would seem to be entirely composed of glass, and that representing the garments is of the kind known as mosaic.

In tesselated work (opus tessellatum), or what we usually term mosaic, glass was more and more used as the desire for splendour increased; in early examples it is only found employed for the parts requiring very vivid colours, the rest being stone, marble, and baked clay; but in the fourth and fifth centuries the mosaics which decorated the walls and roofs were wholly of glass. The use of tesseræ with a surface of gold does not appear to be earlier than the end of the fourth century.

There can be no doubt that glass was used by the Romans in windows, though

* "Vitro absconditur camera."

by no means exclusively, mica, alabaster, and shells having been also used. Glass, in flat pieces, such as might be employed for windows (No. 307), has been found in the ruins of Roman houses, both in England and Italy, and in the house of the Faun at Pompeii, a small pane in a bronze frame remains. Glass of this description seems to have been cast on a stone, and is usually very uneven and full of defects; although capable of transmitting light, it must have admitted of at best an indifferent view of external objects. When the window openings were large, as was the case in basilicas and other public buildings, and even in houses, the pieces of glass were, doubtless, fixed in pierced slabs of marble or in frames of wood. The pieces of glass or other transparent substance so employed were, we may infer, called *specula*. The use of glass for this purpose appears to have been familiar to Pliny, as he says that specula were invented at Sidon.* Specularii are mentioned in the *Codex* (Lib. x. tit. 64), in an ordinance of Constantine II., A.D. 337. They probably were the glaziers of the time, working, however, in other materials as well as in glass; *specular* bearing the meaning of window.†

In this collection is a piece of glass (No. 308), bent by heat, which was given to the writer by Canon Von Wilmowsky, of the Cathedral of Treves; it was found with a large quantity of similar pieces under the walls of that church, accompanied and overlaid by such other remains as to make it tolerably certain that they were relics of the church, burnt in A.D. 420, when the city was pillaged by the Franks.

3.—GLASS IN EUROPE, FROM A.D. 400 UNTIL A.D. 1000.

We have very little positive knowledge of the state of the art of glass-making at Rome, or in the provinces, during the ages which witnessed and followed the decline and fall of the Empire; whatever vessels may have been produced by the workshops were no doubt made by the same processes as those of earlier times, and are probably scarcely distinguishable from them, except by imperfection of manufacture. One specimen in this collection (*Fig.* 72), which may belong to this period, deserves notice; it is a vase, the handles of which have been lost. A similar example in the British Museum, which has preserved its handles, is of the same coarse blue glass, and quite as clumsily made. It exhibits a form closely resembling that of the cups which are frequently represented on the sepulchral memorials of the Christians of the earlier ages, and which there is every reason to believe were intended to represent the chalices used in the Communion. A small

* (*Nat. Hist.*, Lib. xxxvi, c. 26.) "Sidone quondam his officinis nobili, siquidem etiam specula excogitaverat." We cannot understand by specula, mirrors in this passage, unless we suppose that the art of silvering mirrors had been invented at Sidon. See Beckman's *History of Inventions*, art. *Mirrors*. A fragment of a circular mirror of glass, foliated with a thin sheet of pure lead, is stated to have been lately discovered in excavations at Lillebonne.

† "In caldarium suum latis specularibus diem admiserat." (Seneca, l. iii. Ep. 86.)

golden chalice of this form was found some years ago at Gourdon, near Chalon sur Saône, France, and larger examples once existed at Monza. Pope Zephirinus (A.D. 197—217) we are told ordered the use of chalices of glass instead of those of wood (Platina historia de vitis Pontificum, in vita Zephirini).

A considerable quantity of glass was, however, manufactured for mosaics; of these decorations there is a series at Rome, ranging from the time of Constantine until after that of Charlemagne, chiefly or entirely composed of glass. Fine examples of the fifth and sixth centuries exist at Ravenna, and there would seem to be little ground for supposing that the material was imported and not made on the spot. In the eleventh century we find that Desiderius, Abbot of Monte Cassino (afterwards Pope under the name of Victor III.), sent to Constantinople for workers in mosaic;* this fact, coupled with the absence of mosaics of that period at Rome and elsewhere in Italy, excepting Venice, indicates that the manufacture had been discontinued.

The making of glass for windows was, it would appear, continued throughout the dark and middle ages; its use for this purpose is alluded to by Lactantius† in the fourth century, St. Jerome‡ early in the fifth, and Gregory of Tours§ and Fortunatus‖ in the sixth. Isidore¶ writing circa 600, when mentioning glass, says, "neque est alia speculis aptior materia." About 675, Benedict Biscop procured from France workmen to manufacture glass for the church of the monastery at Wearmouth.** In 677, according to Filiasi,†† many Greek workmen went to France for the purpose of working in glass. Anastasius‡‡ tells us that Pope Leo III. adorned the churches of St. Peter and St. John Lateran with glass of various colours; this was between the years 795 and 816, and is the earliest notice of the use of coloured glass in windows which has been met with; it is, however, not at all improbable that it may have been used at a much earlier time.

Drinking vessels of glass are found in the graves of the pagan Saxons in England, and exactly similar objects are found in Normandy and in the neighbourhood of the Rhine, but the place where these were manufactured has not been ascertained; they are composed of glass made without lead and of a horn-like appearance, and are blown very thin. Occasionally the vessels have a number of lobes attached to the exterior, giving them a very singular appearance. Adamnan in his life of Columba (Lib. ii. cap. 32), tells a story from which it would appear that the northern Picts were also in the habit of using drinking cups of glass. One peculiarity to be noticed in most of the cups is, that their bases are either

* Leo Ostiensis, Lib. iii. cap. 28.
† *De Opificio Dei*, cap. 8.
‡ *Comm. on Ezekiel*, chap. xli. v. 16. *Apud Ducange*, art. *Vitreæ*.
§ *Hist. Franc.*, Lib. vi. c. 10.
‖ *Carm.* 1.
¶ *Origines*, Lib. xvi. cap. 15.
** *Hist. Abbat. Wiremuth.*
†† *Saggio sull' antico commercio*, etc., p. 184, n.
‡‡ *Liber Pontificalis.*

rounded or terminate in such small feet that they cannot be made to stand. "No heel taps," must have been the motto of the worthy Teutons who used them.* A specimen may be seen in No. 319 (*Fig.* 73).

Some knowledge of the art of glass-working also seems to have existed among the Irish from an early period; for small pieces of mosaic glass,† and cameo heads,‡ are found in brooches, croziers, and shrines of Irish origin; the examples of mosaic glass display remarkable skill, as may be seen on the crozier of Lismore, belonging to the Duke of Devonshire. It was made for a Bishop Lismore who died in 1112, but it is of course possible that the glass ornaments may be of an earlier date. Another process of decoration employed was that of cutting into the surface of a piece of glass and filling the cavity with glass or enamel of another colour.

The colours and patterns used in both processes are so peculiar as to render it highly probable that the objects referred to were made in Ireland. And it is a very interesting question whence this art was derived; there is no indication that it was practised at the time either in England, France, or Germany; apparently, therefore, it must have been learnt, at a very early date, either from Rome or from Constantinople, or even possibly from Egypt. This last origin may appear at first sight very doubtful, but it has been observed by Dr. Keller, in his remarks on the Irish MSS. at St. Gall,§ that the style of ornament and colouring which characterises them has much analogy with that of Egyptian art, and he points out that there is direct evidence of the sojourn of Egyptian monks in Ireland in the mention in the *Leabhar Breac*‖ of seven Egyptian monks who were buried in Disert-Ulidh.

4.—GLASS OF BYZANTIUM AND THE EASTERN EMPIRE.

Turning from the West to the East, we should naturally first direct our attention to Constantinople, where the manufacture of glass was unquestionably carried on to a considerable extent; one of the gates leading to the port took its name, as M. Labarte has pointed out, from the adjacent quarter in which the glass-houses were situated. Glass was also made at Thessalonica.¶ St. Sophia's, when built

* For specimens of Anglo-Saxon glass, see *Inventorium Sepulchrale, or the Excavations of Dr. Faussett in Kent*, edited by C. Roach Smith, Pl. xviii., xix ; Akerman's *Pagan Saxondom*, Pl. ii., vi., xvii., xxv., xxvi.; Roach Smith, *Collectanea Antiqua*, Vol. ii., Pl. li.; Lindenschmit, *Gräber bei Selzen*.

† In the cross of Cong, the Lismore crozier, the shrine of St. Mogue, etc.

‡ In the brooch called that of Tara.

§ Dr. Keller's Essay originally appeared in the *Mittheilungen der Antiquarischen Gesellschaft in Zurich* for 1851, and has been translated by Dr. Reeves, and published in the *Ulster Journal of Archæology* for July, 1860.

‖ The original MS. is in the library of the Royal Irish Academy.

¶ Joannes Cameniata, *De Excidio Thessalonicensi Narratio*, x., p. 501.

by Justinian, had its windows filled with glass, some of which may perhaps even now remain; and glass was largely used for works in mosaic, and probably made, or at least remelted and coloured, on the spot. We, however, know scarcely anything of the products of the Byzantine workshops as regards vessels or ornamental works in glass; but it is not improbable that some of the cups or vases, which bear the character of classical art in its decline, such as the cup with bacchanalian subjects belonging to Baron Lionel de Rothschild, the situlæ in the treasury of St. Mark at Venice, and two specimens in this collection (Nos. 320 and 321), may have been made at Constantinople; for we may reasonably suppose that this branch of art underwent somewhat the same vicissitudes that befell the arts of painting and sculpture in the Eastern Empire. The Byzantine painters and sculptors seem to have followed classical models with more or less bad taste and feebleness, until the fervour of the iconoclastic Emperors brought about a temporary paralysis of all art and the emigration of many of its practitioners. When in the middle of the ninth century the arts were again more largely practised, ancient traditions had in a great measure been lost, and the new style which we know as Byzantine, into which the older had previously been in some degree merging, became almost exclusively prevalent. Something of the same kind probably happened as regards the manufacture of glass, but examples which we can confidently assign to the post-iconoclastic period are almost wholly wanting. Perhaps the only objects which have been noticed, and which there is good ground for supposing to belong to the centuries intervening between A.D. 800 and A.D. 1200, are some in the treasury of St. Mark's at Venice, which, as they differ much in character from any other kind of glass productions, and in some cases bear Greek inscriptions on their mountings, are probably specimens of Byzantine work. They are supposed, together with many other objects in the same treasury, to have been part of the plunder of Constantinople, when it was taken by the Crusaders in A.D. 1204. Five of these are cups and two are shallow basins; the glass in all is greenish, very thick and with many small bubbles; all have been cut with the wheel. One of the cups, 12 inches wide and 6 high, is of a somewhat elegant form; it has two handles but is otherwise without ornament. Another cup has the surface so cut away that small cones are left standing up, and another has circles formed in the same manner; a third has a very rude figure of a leopard couchant, with outlines and spots left standing up in the like fashion.

The basins are shallow, about 11 inches wide; one has a setting of gems in silver gilt, and a long handle; the other has circles and cones in projecting lines on its under side, and a setting in silver gilt with the inscription *+ΑΓΙΕ ΠΑΝΤΕΛΕΗΜΟΝ ΒΟΗΘΕΙ ΤΩ CΩ ΔΟΥΛΩ ΖΑΧΑΡΙΑ ΑΡΧΕΠΙCΚΩΠΩ ΙΒΗΡΙ ΑΜΗΝ*, *i.e.*, "Saint Panteleon, protect thy servant Zacharias, Archbishop of Iberia, Amen." The most remarkable, however, among these glass vessels is a small vase $3\frac{1}{2}$ inches high by 4 wide, of very dark brown glass almost opaque; the body is somewhat globular, and the mouth widens upwards. The body is decorated with seven circles enclosing figures which are painted on the surface in a pale flesh-

coloured enamel with ornaments in gold and in red. These figures are evidently free copies of antique originals, and are closely allied in point of style to the ivory boxes of Byzantine origin with mythological subjects which may be seen in various collections and church treasuries. Some of the figures are clothed and some nude; one seems to represent Jupiter seated on a throne, and addressed by a figure with wings, probably intended to represent Mercury; another figure holds a trident. The circles are composed of rosettes of blue, green, and red enamel, each surrounded by lines of gold. Above and below the points of junction of the circles are smaller circles of gold enclosing busts of men, with bands of gold in the hair. On the outer side of the mouth are rosettes in groups of four, with scroll-like flourishes in gold between the groups. An inscription in Cufic characters runs round the inside of the mouth, and another round the lower part of the body below the figures. No reading of these inscriptions has as yet been obtained, and it seems probable that they are merely ornamental and without sense. In the character of the figures and the manner in which they are drawn, in the rosettes, and in the busts within medallions, there is so close a similarity to the ivory boxes before mentioned, that we may assume them all to have had a common origin, and this it is evident must have been at some place where works of antique art were familiar objects. The only point of dissimilarity is the presence of Cufic inscriptions, which have never been met with on the boxes in question, and which may, perhaps, point to Sicily, one of the spots where antique, Byzantine, and Arab art conjoined. The ivory boxes with mythological subjects would appear to have been made chiefly in the 11th and 12th centuries, the best period of the Byzantine post-iconoclastic art.

Whether the vase in question was or was not made at Constantinople, there can be little doubt that it was made under the influence of Byzantine art. Theophilus tells us that the Greeks used white, red, and green enamels as well as gold in the decoration of glass vessels; and as M. Labarte has observed, it is to them alone that he attributes the practice of this art. Theophilus appears to have written in the 12th century, and probably in Germany. We may, perhaps, with safety accept his evidence as to such things as he may have seen, for instance vases brought from Byzantium; but he was evidently little acquainted with what really took place there, for it is altogether improbable that the Greeks were forced (as he asserts) to have recourse to the mosaics of ancient buildings for materials out of which to form the cups which they manufactured, when, at the same period, they furnished glass mosaics to Italy and probably to Sicily.

Theophilus also tells us that the Greeks ornamented cups by means of gold leaf enclosed within the substance of the glass,* and that they decorated cups and

* M. Labarte observes that the process described by Theophilus differs from that by which the glass vessels ornamented with gold leaf, found in the catacombs, were made, the first being the application of glass ground into powder, applied in the form of a paste, and then fused in the furnace, while in the early Christian vessels the protecting film was applied in the form of a leaf of glass. But do we know what process was really used by the manufacturers of the 5th and 6th centuries?

flasks of various colours with lines and net-work of white or other coloured glass threads.

A fragment of a glass vessel in the British Museum may very probably be of Byzantine origin; it is very massive, of an opaque turquoise blue, and has been ornamented with enamel painting in lines of red and gold. The art of making cameos in glass by pressure in a mould was practised among the Byzantines, and examples are not uncommon in Museums. A good example is described under No. 323. The specimens are more ordinarily opaque red, like the Italian cameos Nos. 359, 360, and do not generally appear to be very early. Another variety consists of medallions or counters of light green glass, such as one in the Bibliothèque Impériale,* at Paris, which has the bust of a man with the legend *ΕΠΙ ΘΕΟΔΟΡΟΥ ΕΠΑΡ*. "under the Eparch Theodore." Another is described in this Catalogue (No. 322).

The famous Sacro Catino at Genoa, a shallow dish with a foot and handles, long supposed to have been formed out of a single emerald, is more probably of Byzantine than of antique origin. It is hexagonal, rather clumsily formed, with some slight ornament, and has apparently been finished with a tool. The colour is very fine, but it contains many small bubbles. It was part of the booty obtained at the taking of Cæsarea in 1101.

The cup at Monza, said to be hollowed out of a sapphire, is perhaps also glass, the writer, however, failed to detect any bubble on a very close inspection, and it is very cold to the touch. It is of a very beautiful blue, and about three inches in diameter. It is said to have belonged to Queen Theodolinda (circa A.D. 600). M. Labarte† quotes Constantine Porphyrogenitus (*De cær. aulæ Byz.*, p. 661) as enumerating vases of glass among the objects sent by the Emperor Romanus Lecapenus to Hugh, King of Italy, in 926.

It is difficult to find any mention of Byzantine glass-working during the later middle ages, but Clavijo, in the narrative of his embassy to Timour Beg in 1403—1406, states that in the church of St. John Baptist at Constantinople, were many lamps of glass.

5.—GLASS OF THAT PART OF THE EAST NOT SUBJECT TO THE GREEK EMPERORS.

As to the manufacture of glass in that part of the East which was not included in the Byzantine Empire, or which early fell under the dominion of the successors of Mahomet, our information is but scanty. A most remarkable illustration of Persian work may be found in the cup of Chosroes I. (A.D. 531—579,)

* *Catalogue des Camées, etc., de la Bibliothèque Impériale*, par M. Chabouillet, p. 610.

† *Hist. des Arts Indus.*, T. 4, p. 539.

preserved in the Bibliothèque Impériale at Paris. It is a very shallow bowl of gold, in which are set a central medallion of rock crystal sculptured with an effigy of the king, and three rows of medallions, white and crimson alternately, ornamented with rosettes in relief; of these the white are of crystal and the crimson of glass. Between these medallions are lozenges of green glass. Both medallions and lozenges are transparent and set clear. The rosettes on the crimson medallions have been formed by casting or pressing the glass into moulds.

Little can be said respecting the manufacture of glass in the East from this period until the 14th century, but that glass was made in several countries under the Arab rule, is proved by the coins or tokens of glass which are occasionally found, and which are usually inscribed with the names of the Fatimite Caliphs of Egypt in Cufic characters; one of these, in the Bibliothèque Impériale at Paris, bears the name of Al-Moazz, who reigned in Egypt from A.D. 952 to A.D. 975. Another, published by Assemani (*Museo Cufico Naniano*, part 2, p. 121, pl. viii.) has on the one side the name of the Caliph Al-Aziz-Billah (975—996), and on the other, four lions with human heads. The specimens in this collection are placed under Nos. 324—332, and extend from A.D. 952 to A.D. 1094.

The Ortus Sanitatis (*de Lapidibus*, cap. cxxxix.) quotes Aben Mesuay (who is probably the same person as Abou Maher Moussa Ben Jasser, a celebrated physician, who appears to have written in Persia circa A.D. 900,) as speaking of glass as being white, red, yellow, and blue, and it is also mentioned by Avicenna circa A.D. 1000.

The art of glass-making, although not wholly unknown, would however seem to have been but little practised in the parts of the East subject to the Mahomedan rule until after the year 1000; for at the commencement of the eighth century, when peace was made between the Caliph Walid and the Emperor Justinian II., the former stipulated for a quantity of mosaic for the decoration of the new mosque at Damascus. In the middle of the 10th century, the Emperor Romanus II. sent to the Caliph Abderrhaman III. the materials for the mosaics of the Kibla in the mosque at Cordova.*

In the 11th century glass-making was practised with success at Alexandria, for Peter Damian relates that a vase of glass of admirable workmanship was brought from thence to the Emperor Henry II.†

In the 12th century we find from the travels of Benjamin of Tudela (circa 1163) that the making of glass was practised by the Jews at Antioch, where were ten glass manufacturers of that nation, and at New Sur, where were four hundred Jews "shipowners and manufacturers of the celebrated Tyrian glass."‡ He also tells us

* Kugler's *Handbook of Painting*, Vol. i. p. 58, note.

† *Opera*, Rome, 1606, iii. p. 218, quoted by Labarte, *Hist. des Arts Industriels.*

‡ The Rev. H. B. Tristram (*Land of Israel*, p. 52,) states, that at Tyre, in the course of excavations, numberless fragments of glass, shapeless but variously coloured, were found, "and by their solidity suggested the idea that they were the rejectamenta of the ancient glass-works."

that it was said that one wall of the great mosque at Damascus was formed of glass by enchantment, and that there were in it "as many openings as there are days in the solar year, and that the sun in gradual succession throws its light into the openings, which are divided into twelve degrees." He also states that the Shah of Persia, Sanjar (1140-1157), had caused the body of the Prophet Daniel to be placed in a coffin of glass at Susa. We have, unfortunately, no description of the kind of glass then made in Syria, nor have any examples been observed which can be assigned with certainty to the 12th or any earlier century. In the treasury of St. Mark's, at Venice, there is, however, a remarkable vessel of glass which is of oriental fabrication and probably of early date. It is $8\frac{1}{2}$ inches wide by 4 deep, of a turquoise green paste, nearly opaque. On the bottom are four Arabic characters signifying, according to Montfaucon,* "God the Maker;" the bowl is five-sided, and on each side is a rude figure of a hare. These figures as well as the inscription are in low relief, and were probably cut with the wheel. The setting is of filigree with stones and ornaments of cloisonné enamels. There is a tradition that it was a present from a king of Persia, in 1470, but the setting is of a much earlier character and not Persian in style.

There are, at any rate, examples dating probably from the 13th century, and particularly a basin and a large bottle belonging to Baron Lionel de Rothschild; round the latter of these is an Arabic inscription, containing the name of El Malek El Aschraf, a name borne by several Sultans in the 13th century. M. Labarte (*Hist. des Arts Industriels*) mentions a shallow basin in the Musée de Cluny, as bearing the titles of Malek Adhel, who reigned in Egypt from A.D. 1279 to A.D. 1294.

There is little difference in character between this and examples belonging to the next century made in Egypt; all shew that the makers were tolerably expert glass-blowers and could produce vessels of considerable size, but the glass is of bad colour and full of bubbles and imperfections. The makers had probably learnt from the Byzantines the art of gilding and enamelling glass, and made much use of it. Inscriptions in large characters are favourite ornaments; figures of birds, animals, and monsters, are found. The outlines are generally put on in red enamel, the spaces between being often gilt. The enamels are used sometimes as grounds and sometimes for the ornaments; the tints are blue, green, yellow, red, pale red, and white.

Among the products of the Oriental glass-works may be particularly noticed the enamelled lamps which were suspended in the mosques, especially in the 14th century.† Lamps of this kind are still to be found in the mosque of Sultan Hassan (1347-61), at Cairo. One with the name of that sultan is in Mr. Magniac's collection. A specimen, bearing the name of the Emir Sheikhoo, who built a mosque at Cairo in 1355, is in the collection (No. 333, *Plate* VIII.). Other

* Diarium Italicum.

† See *Catalogue of Works of Art on Loan*, 1862, Nos. 4,965-8.

specimens have been preserved, made in the time of Mohammed ben Kalaoun (1293-1341), and of some of his successors.

In this collection, besides the lamp above noticed, may be remarked a bottle of peculiar and elegant form, diapered over with birds (No. 334, *Plate* IX.), and a covered bowl of very ancient though less rich workmanship (No. 335).

Such enamelled vessels were brought into western Europe, and evidently much esteemed, for we find them mentioned in the Royal Inventories of France. In 1380 Charles V. had "trois pots de voirre rouge à la façon de Damas. Ung petit voirre ouvré par dehors à images à la façon de Damas. Un bacin plat de voirre peint à façon de Damas, et une bordure d'argent esmaillée de France et de Bourgogne. Une lampe de voirre ouvrée en façon de Damas sans aucune garnison." In 1399, "Une coupe de voirre peint à la Morisque."* Our Henry III. had a glass cup which was presented to him by Guy de Roussillon, and caused it to be set with a handle and foot of silver.† This may very probably have been a glass of Eastern origin. Edward III. also had a glass cup with a foot and cover of silver gilt.‡

We may see from the above and many like cases that Damascus was supposed in the West to be a chief seat of this manufacture; and an additional proof that it was really so is supplied by what we are told by Clavijo, in the narrative of his embassy to the court of Timour Beg, A.D. 1403-1406, viz., that in 1402 that conqueror carried off from Damascus to Samarcand§ "weavers of silk, men who made bows, glass, and earthenware, so that of these articles Samarcand produces the best in the world." The same writer says (p. 134) that at Timour's banquets, in the camp at Samarcand, meat was served "in basins of gold, silver, earthenware, glass, and porcelain."‖

A few examples of this manufacture, which have been preserved in the West from an early date, deserve mention; one of these is the cup preserved in the museum of the University of Breslau, which is said to have belonged to St. Elizabeth of Hungary, who died in 1231. This is a drinking cup without a foot, of moderate size, and its only ornaments are lines of red enamel forming arabesque patterns. Another is the so-called "Verre de Charlemagne," formerly in the Abbey of Chateaudun, and now in the Museum of Chartres; it has Arabic inscriptions.¶ The "Luck of Edenhall," an elegantly enamelled cup, somewhat oriental in pattern, but without inscriptions, is probably of a like origin. It is preserved in the family of Musgrave of Edenhall, and is enclosed in a stamped leather case of the 15th century.** Another specimen, also with a case of the 15th century, is preserved in the Museum at Douai.

* Laborde, *Notice des Emaux du Louvre*, Glossaire, *sub voce* Voirre.

† Rot. Claus. 29 Hen. III. m. 18.

‡ Kal. and Inv. Exchequer, III. 192.

§ This is confirmed by Cherefeddin, the historian of Timour Beg, who says (Book v., chap. 26), that the artisans were divided among the Emirs, to be immediately conveyed to Samarcand.

‖ Edition published by the Hakluyt Society, p. 141.

¶ Engraved in the *Revue Archéologique*, Tom. xiv. pl. 308.

** Engraved in Lysons' *Cumberland*, p. ccix.

The sack of Damascus by Timour Beg's army and the carrying away of the workers in glass, no doubt seriously injured the practice of the art in that city, and the superiority of the Venetian manufacture, then fast rising to the excellence to which it eventually attained, assisted in bringing about the decay of the art. We hear little from travellers in the East from henceforth about the making of glass, nor do our collections seem to contain examples of Eastern manufacture of the 15th or 16th centuries. In the 17th we again meet with a peculiar and characteristic kind of glass in Persia, blue with gold ornaments, of which No. 343 (*Plate* XI.) in this collection is a very beautiful example. Chardin, who was in Persia between 1664 and 1677, tells us that the windows of the tomb of Shah Abbas II. (ob. 1666), at Kom, were "de cristal peint d'or et d'azur," and these vases may therefore very probably be of that period.

Chardin also speaks of the ordinary glass made at that time in Persia as of bad colour and very imperfect manufacture (vol. iv. p. 257), which he attributes to the badness of the fuel they employed and to the fire not being maintained more than three or four days; the best glass, he says, was made at Shiraz. The manufacture had existed for only about eighty years, having been introduced by a necessitous Italian. Mirrors and "belles bouteilles à prendre du tabac" were, he tells us, brought from Venice.

Glass was also manufactured in this century at Smyrna; for Grelot (*Relation d'un Voyage à Constantinople*, English edit., p. 35) mentions glass-making among the trades practised in that city; he travelled about 1680.

A few words should perhaps be added respecting Chinese glass, though our information about it is very scanty.

The manufacture is not of any great age in China, not earlier, it is said, than the beginning of the last century. Vases of a semi-opaque yellow glass are perhaps those most frequently seen in Europe, and some fine examples were in the International Exhibition of 1867 in Paris, of which one bore the name of the Emperor Kien-lung, 1736 to 1796. Vases nearly two feet high have been noticed in China, and one seen at Pekin had the imitation of a crack and rivets all executed in the glass. The glass objects from China which are more common in this country are small bottles to contain snuff; they are sometimes blue or red, with a coating of white, carved into landscapes or figures, and are often imitations of chalcedony, agate, and other stones; these imitations are executed with considerable skill and success. Chinese specimens, illustrating the various modes of decoration, are placed under Nos. 345 to 354.

6.—GLASS IN EUROPE, FROM A.D. 1000 TO A.D. 1300.

But little has as yet been ascertained respecting the making of glass in the West during the dark and middle ages; the history of even the Venetian

manufacture does not begin at a very early date. The knowledge of the process of making both plain and coloured glass was, however, pretty widely diffused throughout Europe from a period at least as early as the 12th century. This is shewn by the treatises of Eraclius and Theophilus, where we find directions for making glass vessels as well as window glass, and receipts for the production of several varieties of coloured glass. The first of these writers may, without improbability, be supposed to have been an Italian, who lived at some period anterior to the 12th century; but the work, as we now have it, seems to have been added to by an inhabitant of the northern part of France, in or before the 13th century. Theophilus would appear to have written in Germany, and not earlier than the 12th century.* In these treatises a distinction is made between ordinary and Roman glass, and in one passage of Eraclius (Book iii., cap. 49) Jewish glass is mentioned. By Roman it appears clearly that ancient Roman, not Byzantine, is meant, and it is directed that it should be employed for glazing earthen vessels, and for making artificial gems. Jewish glass is to be employed for painting on glass, and probably was glass containing lead. In the seventh Chapter of the third Book of Eraclius, are full details as to the making of glass, in which process two parts of fern ashes and one of the ashes of brush-wood are directed to be employed.

Eraclius describes the method of ornamenting vessels with gold in the same manner as those found in the catacombs at Rome, but he speaks of it, not as an art then practised or having come down by tradition, but as being re-discovered by himself. Theophilus, on the other hand, describes various processes of this ornamentation as being actually practised by the Greeks in his day. In each of these works directions for making both window glass and vessels are given; but the latter branch of the art apparently was not practised in Europe during the middle ages with any considerable success, excepting, as we shall see, in Venice. Vessels of glass of European fabrication, although doubtless made and used for certain purposes, especially perhaps for medical uses,† do not seem to have been in general use, nor were they so decorated as to make them objects of luxury, accordingly they are rarely noticed in inventories. Still one instance occurs in which glass of Flanders is mentioned: "Ung gobelet et une aiguière de voirre blant de Flandres garny d'argent." This belonged to Charles V. of France, in 1379.‡

Some examples of mediæval glass vessels of early date may perhaps be met with in the treasuries of churches, forming the bowls of monstrances; for which purpose rock crystal was more generally used. Vessels of glass, however, are

* See Mrs. Merrifield's *Ancient Practice of Painting*, Vol. i. p. 166.

† In the curious satirical poem by Nigel Wereker, *Brunellus*, or as Chaucer calls it, "the tale of Don Burnel the Ape," the hero buys at Salerno, from one Trufator, a merchant from London, ten "vitrea vasa" to contain drugs. This writer is believed to have lived about the end of the 12th century. In the wardrobe account (*Liber quotidianus Contrarotulatoris Garderobæ*) of the 28th year of Edward I., *i.e.*, 1300, p. 57, mention is made of the purchase for the King's use of "duo urinalia vitrea."

‡ Labarte, *Handbook of the Arts of the Middle Ages*, p. 337.

occasionally mentioned in church inventories at very early dates, as that cited by M. Labarte (*Hist. des Arts Industriels*, T. iv. p. 549,) from the chronicle of the Abbey of Fontanelle, where it is stated that in 823 Abbot Ansigisus gave "cuppas vitreas auro ornatas duas, hanapum vitreum optimum unum." Chalices of this material must have been in use at that period, as the 6th canon of the Concilium Rhemense (A.D. 813) forbad their use.*

Glass for windows, both coloured and plain, was probably made in several European countries, and particularly in France, where the art of glass-making appears to have been practised in the 7th century, for Benedict Biscop brought thence to England workmen skilled in the art. It probably was never altogether lost either in that country or in England. Mr. Hudson Turner (*Dom. Arch. of the Middle Ages*) asserts that there "is not a particle of evidence to prove that any description of glass was manufactured in this country before the 15th century," but we find in the roll of the "Taxacio facta in Burgo Colcestrie," in 1295 (*Rot. Parl.* Vol. i. p. 228), among the jurors, Robert le Verrer, and in that of 1300 (p. 243) Matthew le Verrer; Robert le Verrer is taxed (among other goods), in the taxation of 1300, on "biletts pret. xviii. d. vitrum pret. iiii. s." Henry le Verrer is also taxed, but no mention is made of his stock in trade. These appear from the enumeration of their property, and their position as jurors, to have been among the chief inhabitants of the town, and that they probably were not merely glaziers and glass-painters, but glass-makers. If not the latter, it is difficult to understand why there should have been so many glaziers in such a town as Colchester, and those not petty but principal tradesmen. Possibly the sand of the adjacent coast is of a kind suitable for glass-making; the salt marshes furnish abundance of those plants whose ashes yield the necessary alkalies; abundance of wood was in the vicinity; Colchester, therefore, was not at all an unlikely spot to have been selected as the seat of a manufactory of glass.

The earliest instance of coloured windows in Germany, which has been recorded, appears to be that of windows given to the Abbey of Tegernsee, in Bavaria, by a Count Arnold, in 999,† but it is probable that nothing older than the 12th century now exists. It is doubtful whether anything earlier is to be found in France. In Italy, windows, as has been already stated, were filled with glass, both plain and coloured, at a very early date; down, however, to the 11th century, and perhaps even later, it was not joined together by narrow lines of lead, but the pieces were fixed in "tabulæ" of wood, stone, or perhaps stucco, in the manner long (and even yet) practised in the East. No very ancient instances of windows of coloured glass have been observed in Italy, and there are probably none now existing earlier than the 13th century. Some of the glass in the upper church of the Sacro Convento, at Assisi, may perhaps date from about 1240-1250. Mrs. Merrifield (*Ancient Practice of Painting*, Vol. i., chap. iv.) has very carefully

* Augusti, *Denkwurdigkeiten aus der Christ. Arch.* 12 Bd. s. 29.
† M. A. Gessert, *Gesch. der Glasmalerei*, Stuttgart, 1839, p. 66.

collected notices of glass-painting in Italy, from 1303; they chiefly relate to the artists of Tuscany; several of Venice will be noticed hereafter.

Glass for mosaics was probably made in Ravenna down to the 6th century; in Rome down to the 9th century, and again in the 12th and 13th. In the latter centuries it was much used in Central Italy, in the decoration of monuments, tabernacles, and the like, where it was inlaid in white marble. In Rome, it is not uncommon to find such a decoration composed partly of pieces of antique glass, and partly of the manufacture of the time. As the knowledge of the art of making coloured glass was pretty widely spread, it is scarcely likely that all the glass was brought from Constantinople, or even from Venice.

7.—GLASS OF VENICE, FROM A.D. 1300 TO THE FALL OF THE REPUBLIC.

If glass for windows was largely made in the west of Europe, the other chief branches of glass manufacture,viz., of mosaic, of vessels, and of personal ornaments, were still more extensively practised at Venice. It has been asked, What was the origin of this manufacture? The native writers have been disposed to think that it was brought to the lagunes by the refugees from the mainland in the 5th century; and others that it was chiefly or entirely learnt from the Greeks of Byzantium at a much later date. Both monumental and documentary evidence are wholly wanting as regards the period antecedent to the 13th century, with the exception of the mosaics in the churches of Murano, Torcello, and St. Mark, the earliest of which are those of the church of St. Cyprian at Murano, completed in A.D. 882.* We have no evidence, however, whether these were the work of native or of Byzantine artists, but the fact that Desiderius, Abbot of Monte Cassino in the 11th century, sent, not to Venice, but to Constantinople, for workers in mosaic, indicates that the reputation of Venice in that branch of art, was at that time not great.

The argument in favour of the early existence of the art of glass-making at Venice, and its traditional derivation from Roman workmen (arising from the similarity of processes and colour between the Venetian work of the 16th century, and that of the first and following centuries at Rome,) loses much of its apparent force, when it is remembered that the earliest products of the Venetian glass-houses with which we are acquainted bear a different character, and that the processes in question, such as those of making mille fiori and vitro di trina, first came into operation at the time when all relics of ancient art were carefully collected, and reverently studied and copied.

It is, however, highly probable that the vast undertaking of covering the

* Kugler, *Schools of Painting in Italy*, Vol. i., p. 71.

interior of St. Mark's with mosaic had a most important effect upon the manufacture of glass in Venice; for if the manufacture had already existed, it would unquestionably have received a great impulse therefrom; if it did not exist, the presence of Byzantine artists and workmen skilled in such matters would lead in the most natural manner to the discovery that the lagunes, possessing both abundance of fine sand and of maritime plants yielding alkali, were well fitted for the seat of a manufactory of glass.*

The names of the earliest artists in mosaic who worked at St. Mark's have not been preserved, but in the year 1159 one Pietro was so employed (Lazari, *Notizia delle opere d'arte della Raccolta Correr di Venezia*, 1859, p. 90). Depping (*Hist. du Commerce*, Vol. i. p. 191) is quoted by Mrs. Merrifield (*Anc. Practice of Painting*, Vol. i. p. xc.) as asserting that the manufacture of crystal glass and of coloured glass was carried on at Venice as early as the beginning of the 12th century.

It has been conjectured with some plausibility that the taking of Constantinople, in 1204, may have afforded the Venetians the opportunity of acquiring additional knowledge of the processes employed by the Greek glass-makers. We at any rate find that in 1268 the manufacture was so important that those engaged in it were already collected into a corporation, and formed a part of the procession of the trades which took place at the election of the Doge Lorenzo Tiepolo in that year. On that occasion they exhibited specimens of their best works. In 1283 the workers in glass are mentioned as *butteliarii* and *phyalarii;* the former of which words is generally interpreted as bottle-makers, but "fiali vini" are mentioned in the coronation oath of the Doge Jacopo Tiepolo, in 1229, apparently in the sense of bottles of wine.†

In 1275, according to the Chronicle of Andrea Dandolo, a law was enacted prohibiting the exportation of the sand and other substances used in making glass and also of the fragments of broken glass. Masses of glass, on the other hand, were allowed to be imported as ballast.

On the 8th November, 1291, it was ordered by the Great Council that the glass furnaces should be demolished in the "Città di Rialto" (that is, what is now called the city of Venice) and throughout the whole "diocesi;" and any reconstructions were to take place without those limits, but nevertheless within the district of Venice (distretto delle Venezie). On the 11th August, 1292, the severity of this regulation was mitigated by permission being granted to the makers of small glass

* In later times, however, a great part of the materials of glass were obtained from other sources. Sand is said to have been brought from the mouth of the river Belus, on the coast of Syria (see *Art Treasures, Sec. Vitreous Art*, by A. W. Franks), and Sandys, who travelled in 1610, says, that "in the desert between Alexandria and Cairo is a weed called Kali by the Arabs, which they use for fuel and sell the ashes, crushed together like a stone, in great quantity to the Venetians, who equally mixing the same with the stones brought from Pavia by the Ticino make thereof their crystalline glass." (p. 90.) Much information as to the materials used by the Venetian glass-makers will be found in Neri, *L'Arte Vetraria*, first published at Florence in 1612. Neri calls the quartz "tarso," and the alkali from the Levant, "rochetta."

† Hazlitt's *History of Venice*, Vol. ii. p. 473.

wares (verixelli) to remain even in Rialto, provided a space of fifteen paces were left between the workshops and the houses. These regulations were, of course, to guard against the danger of fire. It is believed that the glass-makers then carried their establishments to Murano, where, however, according to Lazari, there is reason to think that the manufacture had been practised at least as early as 1255.*

The import of glass vessels from Venice into the northern parts of Europe we may conclude was not begun so early as the 13th century, for the only glass wares mentioned in the full and copious tariff for goods imported at Damm, the port of Bruges, enacted in 1252 by Margaret, Countess of Flanders, are rings of glass: "Vas anulorum vitreorum vel cista, quatuor denarios."†

During the 14th century the manufacture of beads and imitation jewellery appears to have flourished at Venice, and Cristoforo Briani and Domenico Miotti are named as the inventors of "Margarite" (false pearls?), and as the first who turned their attention to the imitation of precious stones.‡

M. Labarte suggests that the intercourse with the farther parts of Asia, to which the journeys of the celebrated Polos so much contributed, led to a great increase in the export of such wares, and a successful speculation made by Domenico Miotto in a shipment to Bassora § led to still greater extension of the manufacture and export. In 1318 the makers of beads became a distinct body with a special code of regulations.‖

M. Labarte supposes that the great activity prevailing during the 14th century in the production of beads and false gems, may have retarded the progress of the manufacture of glass vessels.¶ However this may be, no vessels which can be attributed to the 13th or 14th centuries have as yet been noticed or described; something may, however, probably be learnt as to their character by careful examination of pictures of those periods. In a picture of the Last Supper, which formed part of the Campana collection, several vessels of glass were noticed by the writer: one was a bottle of simple but elegant form, standing on a foot, ornamented by spiral lines winding round it; another was a small covered cup, standing on three balls. This picture was attributed to Margaritone of Arezzo (1212-1289), perhaps erroneously, but it seems, however, at least as early as the 14th century.

Glass painting for windows was carried on at Venice during the 14th century. In 1335 Mastro Marco painted windows for a chapel in the church of the Frari; in 1400 Tommasino d'Axandrii, and in 1404 one Nicolo went to Milan to work on the windows of the Duomo.

The estimation to which the art of glass-making had already attained is shewn by some of the enactments of the Senate in the 14th century; on the 22nd December,

* Lazari, p. 90.

† Sartorius, *Urkundliche Geschichte des Ursprunges der deutscher Hause,* 2e Bd. p. 63.

‡ Bussolin, *Guida alle fabbriche di Murano*, p. 49.

§ *Ricerche Storico-critiche sulla laguna Veneta e sul commercio dei Veneziani.* Venezia,1803, pp. 140-189.

‖ Lazari.

¶ Labarte, p. 341.

1376,* it was enacted that the marriage of a noble with the daughter of a "vetrajo" should not impede the descent of nobility to the offspring, and on the 15th March, 1383, a set of regulations was enacted with the view, as is expressed in the preamble, "ut ars tam nobilis stet et permaneat in loco Muriani." Nor was this esteem and admiration of the art confined to Venice, for we find Bertrandon de la Brocquière,† in 1432, when at Venice, mentioning Murano as renowned for its manufactories of glass.

On Sept. 17th, 1399, letters patent were issued by Richard II. in favour of Andrea Zane and Jacopo Dandolo, masters of two Venetian galleys then in the port of London, which include a permission for the passengers to sell their small wares on the decks of the galleys, namely glass vessels and earthenware plates, duty free.‡

If in the 14th century the manufacture of beads and false gems was vigorously prosecuted, an equal amount of energy and skill seems to have been applied in the 15th to the making and decoration of vessels. In 1441 the statutes of the "phioleri," the chief corporation or fraternity of the workers in glass, were made or revised, and the original is preserved in the Correr Library at Venice. The making of windows and of vessels were the departments of the art which belonged to this corporation. Among the most distinguished of the company was Don Paolo Godi of Pergola and his apprentice Angelo Beroviero; the latter, in the first half of the 15th century, had a well-known glass-house in Murano, distinguished by the sign of the Angel. On his tomb, in S. Stefano di Murano, was inscribed an epitaph in which it is said of him "Cui patuit vitrea quidquid in arte latebat."§

An apprentice of this Angelo Beroviero, one Giorgio, nicknamed il Ballerino, is traditionally said to have found the means of copying the receipt-book of his master, and to have sold the secrets he so obtained to another "vetrajo," and thus to have gained the means of establishing himself in the same manufacture; he became the head of the house of the Ballerini.

Marino Beroviero, son of Angelo, was "gastaldo" (warden?) of the company of phioleri in 1468, and appears to have fully maintained the reputation which his father's furnace had obtained, and Signor Lazari thinks that to this family the vast progress which the art made during the 15th century in Venice, may be in great part ascribed.

In 1463 a distinction is found to be drawn between the transparent glasses, called *cristallini* and the ordinary or *comuni*. In 1484 mention is made of the small round panes for windows, called *rulli;* these were distinguished, according to size, into *comuni* and *treperpè* (see Nos. 547, 548).

The earliest examples of the skill of Murano which are still preserved, belong, it would appear, to this period. A specimen in the Correr Museum at Venice is

* Lazari, p. 91.

† *Travels to the Holy Land.*

‡ *Calendar of State Papers*, Venetian, edited by Rawdon Brown. No. 130, p. 38.

§ Cicogna, *Inscrip. Ven.* vi. 467.

ascribed by Signor Lazari to circa 1440. It is a cup of blue glass enamelled and gilt; the chief subjects are portraits of a young man and woman in medallions, it may very probably be a "coppa nuziale," or marriage cup. No. 361, engraved in *Plate XII.*, is an example of the same kind, but the glass is emerald green. This specimen is thought to belong to the latter part of the fifteenth century. No. 363, in *Plate XIII.*, is a cup of blue glass ornamented with a procession of figures, representing a triumph of Venus, and other subjects. Another fine example of the enamelling of this century is a bowl of blue glass, in the possession of Mr. George Field.*

Other examples are somewhat less elaborately ornamented; a scale pattern executed in several colours, somewhat resembling peacock's feathers, is not uncommon (No. 370), and portions, such as the projecting ribs of a cup, are gilt with a very elegant effect. A sprinkling of gold is also common, produced, no doubt, by gold leaf having been laid on glass, afterwards heated and expanded.† The glass vessels made at Venice at this period in general bear a resemblance in form to the vessels of silver and other metals made in the west of Europe; they are often of a fine shape, but rather massive (No. 362). The free use of enamel and gilding seems to shew that the makers were familiar with the products of the glassworks of Egypt and Damascus; the gilding, however, is much better fixed upon the Venetian than upon the Oriental vessels.

In the latter part of this century the influence of the classical revival made itself strongly felt in every department of art, and we find that the workshops of Murano began to produce, instead of covered cups of Gothic form, vases and tazzas of classical outlines. It is probable that the end of the 15th and the earlier part of the 16th century are the periods to which may be especially ascribed those vases and other vessels whose elegant forms have ever made them the delight of all who have a true feeling for beauty, and which bespeak the artist rather than the artisan.

Much, however, as we now admire these objects, they excited at least as much or more admiration at the time they were made. Travellers who visited Venice have mentioned the fame of the glass-houses of Murano, as Bertrandon de la Brocquière in 1432, and Brother Felix Faber of Ulm, who was at Venice in 1484; the latter says, that such precious and beautiful glass wares were manufactured nowhere else in the world, and tells a story by which it appears that the Doge and Senate considered a vase of glass a worthy present for the Emperor Frederick IV. when he visited Venice.‡ Articles of glass for ordinary use were also made at Venice at this time. William Wey, Fellow of Eton College, who died in 1474, in the beginning of his itinerary to the Holy Land advises the pilgrim, when about

* *Art Treasures, Vit. Art.*, pl. ii.

† Examples of this process were no doubt the "ii lyttyll ewers of blew glasse powdered with golde," which were in the chamber of "Domina Mylcentia Fastolf" when the inventory of the goods of Sir John Fastolf was taken in 1459 (*Archæologia*, Vol. xxi. p. 269).

‡ In the inventory of Charles the Bold, Duke of Burgundy (1467—1477) mention is made of a number of vases of coloured glass, among them "ung hanap de jaspre garni d'or à œuvre de Venise. (Labarte, *Hist. des Arts Industriels*, T. iv. p. 572).

to take ship from Venice, to provide himself with "dysches, platerrys, sawserrys, other cuppys of glas."

In the first quarter of the 16th century the Bolognese monk, Leandro Alberti, visited Murano, and says, that there were then twenty-four glass-houses at work; among the masters he makes special commendation of Francesco Ballerino, and describes, among the remarkable objects made of glass, a galley with all its tackle, a braccio in length, and an organ which produced most melodious sounds.*

The Venetian Republic manifested the high esteem in which it held the art of glass-making, by the bestowal of peculiar privileges on those who practised it. An enactment of 1490 placed the corporations of glass-makers under the immediate jurisdiction of the Council of Ten, withdrawing them from those of inferior authorities;† and in 1502 the code of law known as the Statuto di Murano, which regulated the administration as well as the civil and criminal justice of the island, was confirmed by the Senate. This code remained in force until the fall of the Republic.

In 1547, according to Bussolin (p. 62), the Council of Ten adopted measures of precaution with a view to preventing the art from being carried abroad; the Inquisition of State, by the 26th article of its statutes of 1454, as given by Daru,‡ had already ordered, that if a workman of any kind should transport his craft into a foreign country to the injury of the republic, and refuse to return, an emissary should be commissioned to put him to death. Daru states, on the authority of a report preserved in the French archives, that this punishment was executed upon two workmen whom the Emperor Leopold had induced to enter into his states.§

The account of the state of the art given by Marcantonio Coccio Sabellico in his book *De situ Venetæ Urbis*, written about 1495, is so interesting as to deserve quotation at length. "Murianum inde vicus, sed qui, ædificiorum magnificentia et amplitudine, urbs procul spectantibus appareat; longitudine ad mille passus patet; vitrariis officinis præcipue illustratur. Præclarum inventuum primo ostendit vitrum posse crystalli candorem mentiri; mox, ut procacia sunt hominum ingenia, et ad aliquid inventis addendum non inertia, in mille varios colores innumerasque formas cœperunt materiam inflectere. Hinc calices, phialæ, canthari, lebetes, cadi, candelabra, omnis generis animalia, cornua, segmenta, monilia; hinc omnes humanæ deliciæ; hinc quicquid potest mortalium oculos oblectare; et, quod vix vita ausa esset sperare, nullum est pretiosi lapidis genus quod non sit vitraria industria imitata; suave hominis et naturæ certamen. Quid quod et murrhina hinc tibi vasa sunt, nisi pro sensu sit pretium. Age vero cui primo venit in mentem brevi pila includere omnia florum genera quibus vernantia vestiuntur prata. Atqui omnium gentium hæc oculis maritima subjecere negotia, ut, quæ nemo alioquin credibilia putasset, jam nimio usu vilexere occeperint. Nec

* *Isole appartenenti all'Italia*, ed. 1576, p. 95.
† Lazari, p 93.
‡ *Histoire de la Republique de Venise*, Tom. vi., p. 402.
§ Ibid., Tom. iii., p. 152.

in una domo aut familia novitium hæsit inventum; magna ex parte vicus hujusmodi fervet officinis." (Lib. iii.)

It seems from this account that the invention, or more properly the re-invention of *mille fiori* was made before the end of the 15th century, that of *Vitro di trina*, lace or reticulated glass, appears to have soon followed, for it is described by Biringuccio in his *Pirotechnia*, (Book II. cap. xiii.) the first edition of which was published in 1540, in the following words: "risguardinsi ancho non solo le cose picchole ma le grandi che fan di vetro biancho o d'altri colori, che paiano intessuti di vimine con quanta egualità e giustezza di termini con coloro eparii locati." It has been already remarked that these two methods of ornamenting glass vessels were re-inventions, for there can be little doubt but that they were suggested by the specimens of antique glass which were occasionally found. Biringuccio gives a lengthy description of two specimens of antique mosaic glass which he had seen,* and the like were no doubt eagerly sought for and studied by the active and intelligent glass makers of Murano.

These beautiful and diversified productions were highly valued at the time they were made, and they were thought worthy to appear at the festive entertainments of the highest classes of society, where they took very much the place which porcelain now occupies, precisely in the same manner as in the later Roman period. In the early part of the 16th century oriental porcelain was of the greatest rarity in Europe, majolica was then only approaching its highest point of perfection, and the other earthen manufactures were of a very rude description. No wonder that the luxurious great of the time sought variety from the monotony of gold and silver by availing themselves of this beautiful manufacture, which almost daily offered new forms and new colours capable of pleasing the most fastidious taste.

A curious and instructive instance of the variety of articles, and the extent to which they were employed in a royal household, is afforded by the inventory of effects belonging to King Henry the Eighth in 1542, which were under the custody of Sir Anthony Denny, at the Palace of Westminster.†

As the greater part of the articles of glass were no doubt of Venetian workmanship, it will not be improper to notice them here in connection with the history of the Venetian manufacture. Nearly 450 articles of glass are enumerated, consisting of bottles or flagons, "layers,"‡ ewers and basons, bowls, standing cups, goblets, "glasses like pottes," sometimes with covers, and sometimes with "eares," and with one or more handles, "great glasses like bolles standing upon fete," "cruses," spice plates, "lowe candlestickes," "great bell candlestickes," "aulter candlestickes," trenchers, spoons, (the handles only being of glass), "platers, disshes and

* Such fragments were often used at Rome by the workers in mosaic, in conjunction with other pieces then newly made. Examples of the 12th and 13th centuries may be found at Rome.

† Communicated by Mr. Burtt to the *Archæological Journal*, Vol. xviii., from the original MS. in the Record Office.

‡ Vessels for washing with covers and sometimes spouts.

sawcers," a "casting bottell," a "baskett," and a "Hollywater Stocke with a bayle."

Many of these were of blue glass, or of blue glass partly gilt, one "leyer," is of "blewe glasse partly gilt, the leyer having the Kinges Armes gilt upon it." One bason and ewer, several bowls, cups, and the "baskett with two eares," are of "diaper work of sundry fashions," probably "vitro di trina." Many of almost every sort are of "jasper colour," doubtless what we call schmeltz, a few are described as "painted white galley fashion," *i.e.* enamelled white, like majolica. A few articles, among them some spice plates and some cruses, are of green glass. Two "litle standing cuppes with covers chalice fashion," and some glasses "like pottes," and a cruse are of "glasse of many colours," possibly mille fiori. Four standing cuppes were of blewe glasse "paintid and gilt." Four glasses and one little glass are described as having "long smale neckes and great bellies." These last were probably specimens of those strangely shaped glasses which have been supposed to have been intended for alchemical purposes.

There is one article described as "oone glasse garnisshid in the top with silver like a frame with belles of silver hanging in it," and "oone thike glasse of christall with a cace of lether lyned with crymsen vellat."

A "lowe candlesticke," is of jasper colour, and four "lesse bell candlestickes" of glass, partly gilt. The expression, bell candlestick, describes a form well known through Venetian examples of brass, engraved and damascened,which exist in collections; but candlesticks of glass of this period are rare.

The casting bottle was no doubt of the same fashion as those still used in the East, for sprinkling perfumes over guests. The Hollywater stock was a small pail for holy-water; Mr. Burtt supposes the "bayle" to be a handle, but it may perhaps be a ladle.*

A curious example may still be seen of a banquetting table, set out with its services of glass, which probably remains, for the most part, as when originally arranged about this period. This is to be found in the Sacro Monte, at Varallo in Piedmont, (see *Murray's Handbook for Switzerland and Piedmont*,) where, is an assemblage of about fifty oratories, each containing groups of figures of life-size, modelled in clay, with backgrounds painted in fresco, and all the accessories required by the subjects, which are nearly all events in the history of our Saviour. In that of the Last Supper, the table and a sideboard are furnished with vessels of Venetian glass, chiefly tazzas and cups, and as the oratory is locked up and glazed in front, these articles may very possibly have remained uninjured from the time at which they were first placed there. The Sacro Monte was commenced about 1486, but the greater part of the oratories were constructed during the first seventy years of the 16th century.

* Handles are repeatedly mentioned in this inventory by that name, bayle only occurs in this instance. The highly ornamented brass vessels of the same period, made at Venice, were sometimes, perhaps always, furnished with corresponding ladles. To bale a boat is a well known expression.

A very curious account of the employment at banquets of these ornamental vessels may be found in the "aggiunta" (dated Venice 1593) to *Il trinciante* of Vincenzo Cervio, in which is a description of the banquet, given at Mantua in May, 1581, at the marriage of the Prince of Mantua, in the following words: "Vi erano oltre le ricchissime credenze e bottigliarie ordinarie una prospettiva di diversi bicchieri, carrafe, e giarre, e altri bellissimi vasi di cristallo di Venetia, che credo vi fussero concorse tutte le boteghe di Morano; e di cio ve n'era di bisogno poiche tutte le signore convitate doppo che havevano bevuto rompevano il bicchiere che tenevano in mano per segno di grande allegrezza."

This usage of breaking the glasses after drinking from them, will be familiar to all acquainted with the social customs of this, as of other European countries, in the 16th and 17th centuries. It must have been eminently "good for trade," and no doubt contributed much to the prosperity of Murano.

The other branches of glass manufacture were also actively carried on and developed; among them the making of bugles, which Biringuccio tells us were formed out of sticks of glass drawn out in lengths of 30 braccie, and of the thickness of string.

A certain Andrea Vidaore has the reputation of having, about 1528, brought to perfection the art of making beads and ornaments by the blowpipe, a method of working which was practised by a section of glass-workers known as "soffialume."

About the same time the making of glass mirrors was greatly improved, particularly by one Vincenzo Roder, and in 1564, the "specchiaj" formed a distinct corporation, with statutes and privileges peculiar to them.*

During the 17th century the manufacture of glass continued to prosper at Murano, and many of the more beautiful objects preserved in collections may be attributed to this period.

England, during the same period, imported large quantities of glass for table use from Venice. In the Sloane MSS.† in the British Museum are copies of several letters addressed, in 1667, by an English glass-merchant, John Greene, of Holborn, to Signor Alessio Morelli, his correspondent at Venice, specifying the forms and colours of the vessels which were to be sent.

The Comune of Murano had the privilege of causing a certain number of medals or tokens to be annually coined at the Venetian mint; these were made of the same size as the coins known as *oselle*, and bore the arms of the reigning Doge, of the Comune, the Podestà, the Chamberlain, and the four deputies of Murano. These coins were presented to the local magistrates and to some of the higher authorities of the Venetian Republic. When it was desired to make a present to some distinguished visitor to the island one of these was enclosed in the substance of the bottom of a cup, and thus formed, as Lazari remarks, a significant present, and a memorial of the special industry of the island and of the ample privileges with which the sovereign state had honoured it. The first of these "oselle

* Lazari, p. 93.

† Add. MSS. 855.

Muranese" which has been preserved, is of the year 1581; there is a lacuna in the series from thence to 1673, from which it is nearly complete until 1796.*

The mode of enclosing a coin is illustrated by a specimen in this Collection (No. 682), where a *mezzo zecchino* of the Doge Francesco Molini, 1646—55, is enclosed in the stem of the goblet.†

During the 18th century the manufactories of England, France, and especially of Bohemia, had begun to compete successfully with those of Murano; the cut-glass in particular which they produced had come into fashion, and the demand for the peculiar productions of Venice was correspondingly reduced. One of the manufacturers of Murano, Giuseppe Briati, was determined to learn the new processes by which the Bohemian glass-makers were enabled to obtain such beautiful results, and accordingly worked for three years in a Bohemian glass-house in the disguise of a porter. Returning to Venice he obtained, in 1736, a patent for ten years to manufacture glass after the fashion of Bohemia; his neighbours at Murano, however, persecuted him so much through envy at his success, that in 1739 he obtained permission to establish a glass-house in Venice itself, which he did in the street known as that of the Angiolo Raffaelle. Here, according to Signor Lazari, he worked for many years with very great success, particularly in the manufacture of mirrors with frames of glass, ornamented either in intaglio or with foliage of various colours, and also on the production of chandeliers with flowers, leaves, and bunches of grapes.

Briati was also most successful in the making of vases of "vitro di trina," or "filigrana;" these, says Lazari, he made with such taste and lightness, and of forms so fully equal to those of the best productions of the cinque-cento period, that the vases of Briati are often supposed (particularly in England) to be of an earlier period. The works of Briati may be distinguished, he thinks, by the superior purity and brilliancy of the glass; they were so much admired, that at the public banquets of the Doge they were placed on the side boards among the gold and silver plate, and the demand for them and the quantity made were proportionately great. M. de la Lande, who visited Venice in 1765-1766, mentions Briati as making objects of the greatest delicacy and particularly lustres, 6 or 7 feet in diameter, which were known as "ciocche.‡ Briati died in 1772. Artificial avanturine seems to be an invention of this period, as M. de la Lande says that one manufacturer of Murano had alone the secret of making it. At the time of his visit there were fifteen glass-houses working at Murano, but only one, that of "Jean Mota" (properly Miotti) made mirrors, the largest of which measured $4\frac{1}{2}$ feet (French)§ square. No mirrors, he says, were preferred to those of Venice, except the French, which however were twice as dear.

* There is a good, though not complete, series of these *oselle* in the British Museum, commencing in 1674.

† In the British Museum is a drinking-glass, stated to have come from the Palace of Whitehall, in the stem of which is enclosed a threepenny-piece of Charles II., dated 1679. The glass seems hardly, however, to be so ancient.

‡ *Voyage en Italie.*

§ 4 feet $9\frac{1}{2}$ in. English.

The fall of the Republic was accompanied by the interruption of trade and the decay of manufacture, and the glass-makers had to confine themselves to the production of beads and of articles of a common sort for domestic use.

The ornamental productions of the glass works of Murano are extremely varied in character, and have been well classed by Mr. Franks* in six divisions, viz. :—

1st. Vessels of colourless and transparent glass, or of glass of single colours; that is, glass coloured with metallic oxides before being worked into vessels.

Clear white glass is generally used for drinking glasses, but they are not unfrequently decorated with coloured glass laid on in threads externally, or forming part of the ornaments attached to the stems; these last are very commonly twisted and made to assume the most fantastic forms (Nos. 571, etc.). The coloured glasses are usually blue or purple, but green, amber, ruby, and an opal white are met with; the last two appear not to be of early introduction. A few examples occur where two colours are employed, one internally, the other externally (see No. 722).

2nd. Gilt and enamelled glass. These methods of decoration were employed on both coloured and colourless glass; some examples of the 15th century have been already noticed. The cups and vases of this period are generally rather massive; in the 16th century when extreme lightness and elegance of form were sought after, the drinking glasses were too thin to bear the heat of the enamelling furnace without losing their shape. The enamelling was, therefore, in a great measure, confined during this century to tazze, bowls, or salt-cellars; the decorations are chiefly coats of arms, the lion of St. Mark, or merely flowers and dots, in place of the portraits, processions, and other elaborate subjects employed in the previous century.

3rd. Crackled glass. This which has a surface rough and divided irregularly by ridges, like ice frozen in the wind, is supposed to have been made by suddenly cooling the vessel when half blown, and then reheating and expanding it, so as to increase the distance between the sections into which the surface was cracked by the sudden change of temperature. It is believed to date from the 16th century.

4th. Variegated or marbled opaque glass, commonly known by the German word *schmelz*. The most common variety is a mixture of green and purple, which, by transmitted light, appears deep red; sometimes it resembles jasper, sometimes chalcedony; other varieties are imitations of lapis lazuli and tortoise shell, and an opaque white, speckled with blue and red, is met with. Avanturine may be included in this class, and patches of it are sometimes found mixed with schmelz. These appear to belong in great part to the 17th century, but the jasper colour we have seen was made in the 15th century. Avanturine, as has been stated, was invented in the 18th century.

* Observations on Glass and Enamel, in *Art Treasures of the United Kingdom at Manchester.*

5th. Millefiori or mosaic glass. This is made from sections of the *canne* or rods, which exhibit patterns. These wares are clearly imitations of the ancient Roman process, but are not executed with as much taste and success. The process would appear to have been tried in the 15th century, as it is mentioned by Sabellico.

6th. Reticulated, filigree, or lace glass; called by the Italians "vitro di trina," "di filigrana," "a ritorti," and "a reticelli." These varieties contain fine threads of glass, generally coloured, but sometimes milk-white (*latticinio*) included in their substance, and are certainly among the most beautiful of the products of the skill of Murano. The idea was, no doubt, borrowed from antique fragments, but the Venetians far surpassed the ancients, if we may judge the latter by what has come down to us. M. Labarte has given an elaborate account of the manner in which many of the patterns were produced. The general outline of the process is as follows:— Canes were prepared enclosing threads of opaque white or coloured glass; these were placed side by side in a mould, and a thin bubble of glass blown into the midst, so as to adhere to the canes; the whole was then reheated and formed into a hollow cylinder, which was then fashioned in the same manner as any ordinary glass. An infinite variety of patterns may, it is evident, be produced by modifications of this process. A still further intricacy was obtained by using two cases or cylinders, the lines of which ran in contrary directions; when one of these was placed inside the other and the two welded together, a reticulated pattern was produced. A small bubble of air was left at each crossing of the canes, as each of them would project a little above the general surface of the cylinder or case of which it formed a part.

An extraordinary amount of dexterity and skill in manipulation must have been required to produce works so minute and delicate in their details and so perfectly exact and regular in their patterns, as are the finest specimens of this kind.

Vessels of all sizes and forms were made of this "vitro di trina," or lace glass comprising cups, drinking glasses, ewers, tazze, and circular dishes. Lazari mentions an example of the last, in the Correr collection, measuring nearly 23 inches in diameter (55 centimetri) as one of extraordinary size. This he attributes to the manufactory of Briati.

The thinness of Venetian glass made it unsuitable for cutting or engraving; but in the 18th century the desire to compete with the fashionable style of the time induced the manufacturers, and probably Briati in particular, to make some essays in those modes of ornamentation; one of these in the Correr Museum, a decanter, has the arms of Foscari with a cypher of A and F, cut with the wheel; this was, no doubt, made for Alvise Foscari, Doge of Venice from 1735 to 1741, and probably by Briati. A few examples are engraved with ornaments of flowers and foliage with a diamond point; this, however, was also done in Germany, as Matthesius,* writing about 1562, mentions the practice.

* In his fifteenth Sermon, p. 902.

The lightness and strength of the Venetian glass are, it is well known, due to its not containing lead like our modern flint glass; and this lightness enabled the makers to produce those miracles of delicacy and slightness which we admire so much. As has been seen, earnest endeavours were made to keep the processes of manufacture secret, and these have so far succeeded that few particulars of the manner in which the manufacture was conducted have been made public. Biringuccio (*Pirotechnia*, Lib. ii.) tells us that the materials for glass were alkali, obtained either from the ashes of a "herba calida," brought from Syria or from the neighbourhood of Maguelonne, near Montpelier, or from those of fern or of "uznea"* (moss, or lichen, or seaweed?) and pebbles of white quartz,† or if these were not to be had, white sharp sand. Two parts of the sand or pebbles and one of the alkali were to be well mixed with a certain quantity of manganese, and the whole melted in a reverberatory furnace. The mass thus obtained when broken up, he says, was called "fritta," and he then proceeds to give directions respecting the form and dimensions of the furnaces and pots in which the glass was to be melted for working.

Garzoni, who wrote about 1580, in his *Piazza Universale*, gives a very similar account, but says, that the glass made with the alkali obtained from fern ashes, was yellow and weak, and calls the plant named "uznea" by Biringuccio, "ugnea."‡ The ashes brought from the East, or from Syria, according to him, were the best, but they were also brought from France. It seems not unlikely that the *cenere* obtained from ugnea, or uznea, was kelp. Iron calcined, he states, gave a red colour, tin a white, copper a green, and lead an emerald hue.

8.—GLASS IN FRANCE, GERMANY, ENGLAND, ETC., FROM A.D. 1300 TO A.D. 1750.

As has been already said, it is probable that during the middle ages glass was manufactured in most European countries, but this was chiefly for use in windows. Sufficient skill to produce articles of such elegance as to fit them for the tables of the rich, was probably wanting, and the somewhat rough habits of life made vessels of metal or wood more suitable to the poor.

Bottles and drinking cups of glass were in use to some extent, and representations of them may be found in manuscripts or early printed books; for instance, in the *Ortus Sanitatis*, printed at Venice in 1511, the article *Vinum* is illustrated by a cut, shewing a man drinking from a glass cup, with a glass bottle standing before

* "Tal cenere chi dice che la si fa di Felce, e chi Duznea, qual di queste hor sia non importa." *Pirotechnia*, Lib. ii., c. xiii.

† "Quelle pietre vive et bianche di fiume, che si chiamano cogoli, che sono alla vista chiare et frangibili, e che hanno certo aspetto di vetro."

‡ John Florio, in "*Queen Anna's New World of Words*" (published 1611) explains Ugnea as "a kinde of fearne of whose ashes they make the best kinde of glasse."

him. These are evidently glass, as the liquor in them is shewn by a dark shade. The cuts of this edition seem to be of German origin, and probably of the 15th century. The bottle is not inelegant in form, long necked, and with a foot.

Occasionally some manufacturer, more skilful and more enterprising than his brethren, may have been stimulated, by the sight of a Venetian goblet, to try his hand at a similar production, but it would appear that it was not until the 16th century that anything was produced in France or Germany of sufficient originality to stamp it with a peculiar character, or of sufficient richness or elegance of ornamentation to ensure its preservation.

Signor Lazari says that, in the beginning of the 14th century, the French Government encouraged the national manufactories of glass, but without much success, and Mr. Franks states that the Dukes of Lorraine appear to have established manufactories in that territory before the 16th century.* There were also glass-houses in Provence as early as the 13th century, and these, in the 16th, appear to have attained considerable skill. The curious drinking glass, No. 824 of the catalogue (*Plate* XX.), may, with much probability, be attributed to some Provençal manufacturer, as the inscriptions shew that it was made for one Jehan Boucau, and a family of the name of Boucault existed in Provence. It is of yellowish glass, and enamelled in colours; the costume of the figures on it indicates the earlier part of the 16th century.

In 1338, Humbert, Dauphin of Viennois, granted to a glassmaker, named Guionet, a portion of the Forest of Chamborant, to establish there glass works, on condition that he should furnish the Dauphin annually a considerable quantity of glass wares amounting in all to no less than 3,151 pieces.†

There were also glass-works in Poitou from early times, several different glass-houses having been at work. Some examples of goblets, enamelled, one with arms and another with three figures of men in armour, are engraved in *L'Art de Terre chez les Poitevins suivi d'une étude sur l'ancienneté de la fabrication de verre en Poitou*, by Benjamin Fillon, Paris, 1864. The arms on one of these goblets are those of a family of Poitou, on the other is an inscription, EN LA SEVVR DE TON VISAIGE TV MANGERAS LE PAIN. A very pretty drinking glass has enamelled on it the words, A BON VIN NE FAVLT POINT ANSEIGNE; and one in the Museum at Poitiers, has a somewhat unintelligible French inscription.‡

In the 16th century, Henri II. brought into France an Italian named Theseo Mutio, and established him at Saint-Germain-en-Laye.§ In 1603, Henri IV.

* See Beaupré, *Recherches sur les verriers dans l'ancienne Lorraine.* Nancy, 1847.

† Le Grand d'Aussy, *Historie de la vie privée des Français.* Paris, 1815. T. iii., p. 221; who gives the following account:—Cent douzaines de verres en forme de cloche; douze douzaines de petits verres évasés; vingt douzaines de hanaps ou coupes à pied; douze d'amphores; trente-six d'urinals; douze de grandes écuelles; six de plats; six de plats sans bord; douze de pots; douze d'aiguieres; cinq de petits vaisseaux nommés gottelles; une de salières; vingt de lampes; six de chandeliers; une de larges tasses; une de petits barrils; une grande nef, et six grandes bottes pour transporter du vin."

‡ See also for French enamelled glass, *Cabinet de l'Amateur* for 1862, p. 289.

§ Le Grand d'Aussy. T. iii., p. 222.

established manufactories at Paris and Nevers, and it is to them that M. Labarte* ascribes a ewer and basin of opal glass, formerly in the d'Huyvetter collection at Ghent, with the inscription VIVE LA BELLE QVE MON COEVR AISME, 1625. The ewer is now in the British Museum.

Such examples are, however, of very great rarity, but it is possible that some of the glasses supposed to be Venetian, are really of French origin.

The German glass-makers produced a far greater number of vessels of distinct and peculiar character than the French. The earliest of these which have been positively ascertained to be of German origin, are the cylindrical drinking-vessels, generally called wiederkoms. See Nos. 836 to 846. These are sometimes very large, some being as much as 20 inches in height. The glass has generally a greenish cast, and they are ornamented with paintings in enamel, of no great merit, as M. Labarte remarks, but with a stamp of originality. The designs most commonly met with, are the Emperor and Electors of Germany the Imperial Eagle bearing on its wings the arms of the states which composed the Empire, or the arms of those for whom they were made. The oldest date which has been met with is that of 1553,† on a specimen in the Kunstkammer at Berlin, but the manufacture continued until about 1725, and a great many imitations are made in the present day.

Towards the middle of the 17th century, paintings of much greater artistic merit were executed on goblets and wiederkoms; these are most frequently painted in grisaille, and often represent processions, battles, or like subjects. M. Labarte mentions specimens in the Kunstkammer at Berlin, signed by Johann Schapper, of Nuremberg,‡ with dates of 1661, 1665, and 1666; by H. Benchert, 1677; and Johann Keyll, 1675. Nos. 859 to 861 are specimens of this style of decoration.

From the beginning of the 17th century, some of the Bohemian glass manufacturers had succeeded in producing very pure crystal-glass, well adapted to receive engraving. Caspar Lehmann, who was in the service of the Emperor Rudolph II., received from that sovereign, about 1609,§ the title of lapidary and glass-cutter to the court, and worked at Prague. He had there an assistant, Zecharias Belzer; and a scholar, George Schwanhard, who obtained from the Emperor a continuation of Lehmann's patent. Schwanhard worked afterwards at Nuremberg and Ratisbon, and died in 1667, leaving two sons, George, who died in 1676, and Henry, who survived him for a good many years, dying in 1696. These appear to have worked both with the lapidary's wheel, producing engravings in incavo, and with the diamond point, producing etchings.‖ Henry Schwanhard is believed to have discovered the method of etching on glass by the help of fluoric acid, about the year

* *Hist. des Arts Industriels.* T. iv., p. 596.

† Labarte, p. 358.

‡ Born at Harburg on the Elbe; he died February 3rd, 1670. See Doppelmayr, *Nürnbergische Kunstler*, p. 233.

§ Beckman's *History of Inventions*, Vol. iii. p. 209; Doppelmayr, *Nürnbergische Kunstler*, p. 231.

‖ Three of their sisters, Sophia, Maria, and Susanna, likewise practised the art of engraving on glass.

1670. He generally employed it to eat away the ground, leaving the figures with their original surface, which, being smooth and clear, contrasted with the dull ground.*

Hermann Schwinger was also renowned as a glass engraver at Nuremberg; he was born in 1640, and died in 1683.† One of his productions is in the collection, No. 883.

Some of the engravings shew very good drawing and much skill in execution. Dr. Pococke, who travelled in Germany in1736, says, that some of the large drinking glasses made at Rispen, to which the Potsdam glass-works had been removed, were so finely cut as to sell for from £100 to £150, and that the glass was the best in the world.‡ The Bohemian glass, he says, was thick and strong, and almost as good as the English. It was ground into figures at Breslau, and he saw a glass, the cutting of which cost £20. Such ornamentation became fashionable and popular, and the art was practised in Holland, and probably also in France and in England.

One of the most remarkable productions of the German glass-houses is the beautiful ruby glass (see Nos. 869, 870), which, though it had been already produced both by Romans and Venetians,§ was brought to perfection by Kunckel‖ about 1679, when he was director of the glass-houses at Potsdam; the finest colour, it is believed, was obtained from gold, though he affirmed that he could give glass a perfect ruby red without the use of that metal. It is now well known that a beautiful ruby can be obtained by the use of copper, but the manipulation is difficult, and the result somewhat uncertain, a little more or less exposure to heat producing very different tints.

Of the manufactory of glass in Flanders and Holland little seems to be known. As has been already stated, glass vessels are occasionally described in mediæval inventories as of Flanders. Dr. Christopher Merret, who translated and annotated Neri's Treatise on Glass,¶ in 1662, gives there a description of the glass furnaces of the time; and in the Latin translation of his work, published at Amsterdam in 1668, is given an engraving of a Dutch furnace, and the tools there employed.

Etching on glass seems to have been practised with considerable success in Holland, as shewn by specimens in the collection (Nos. 887 to 895); and also engraving on glass, though at a somewhat later date (see Nos. 897 to 899.)

* Doppelmayr, p. 250.

† Doppelmayr, p. 237.

‡ Pococke's *Travels*, Vol. ii. p. 231. Nos. 884 and 885 may not improbably have been made at Rispen.

§ Beckman, Vol. i. pp. 203, 207.

‖ John Kunckel was born at Rendsberg, in Holstein, in 1630; he became chemist to the Duke of Lauenburg; then to the Elector of Saxony. In 1679 he went to the Elector of Brandenburg to superintend his glass works. On the Elector's death he returned to his own estate; but in 1603 he entered the service of Charles XI., King of Sweden, who created him Baron of Loewenstern. He died at Stockholm in 1702.

¶ Neri's *Arte Vetraria* was published in Florence in 1612; translated into English and added to by Merret, London, 1662; this last was then translated into Latin with further additions, Amsterdam, 1668; next translated into German and further added to by Kunckel, Frankfort, 1689; Nuremberg, 1743, etc.; and the whole translated into French by d'Holbach, who added several other treatises, Paris, 1752.

Of the English manufacture of glass very little can be said. The earliest positive evidence that we have of the making of glass in England seems to be in 1447, when John Prudde, of Westminster, in covenanting to execute the windows of the Beauchamp Chapel at Warwick, engages to use no "glasse of England;" this, however, clearly shows that English glass was commonly made at that time, though not esteemed. In 1485, English glass is again mentioned in conjunction with "Dutch," "Venice," and "Normandy;" * the price of the first was 1d. per quarrel, of the second 4½d., of the third 5d., and of the fourth 6d. per foot; so that the English, if the quarrels were of an ordinary size, was the dearest, and presumably the best.

We are told by Thomas Charnock † in 1557,—

> "As for glass makers, they be scant in the land,
> Yet one there is, as I do understand,
> And in Sussex is now his habitation,
> At Chiddingsfold he works of his occupation."

and Fuller, writing in 1662, asserts that "coarse glass-making was in this county (Sussex) of great antiquity."‡ Another notice of the manufacture of glass in the same county says,§ "Neither can we match the purity of the Venice glasses, and yet many green ones are blown in Sussex, profitable to the makers and convenient to the users thereof."

Stow, in his *Chronicle* (p. 1040), tells us that "the first making of Venice glasses in England began at the Crotchet Friars, in London, about the beginning of the reign of Queen Elizabeth, by one Jacob Vessaline, an Italian." It is, no doubt, to this manufacture that the author of *The Present State of England*, Anno 1683, Part iii. p. 94, alludes when he states, that it was in 1557 that glasses (not glass) first began to be made in England,‖ and that the finer sort were made in Crutched Friars. The fine flint-glass (he says), little inferior to that of Venice, was first made in the Savoy House, in the Strand, London, but the flint-glass plates for looking-glasses and coach windows were made about 1673, at Lambeth, by the encouragement of the Duke of Buckingham.

In 1567, Dollyne and Caryc, of Antwerp, obtained a patent of monopoly to make glass, and made a contract with Thomas and Balthazar de Hamezel, dwelling at the glass-houses of Vosges, in the country of Lorraine, to come into England, make glass there, and teach the art.¶ In 1589, George Longe petitioned for a new patent, and in his petition states that there were fifteen glass-houses in England these he proposes to reduce to two, and to erect others in Ireland.**

The manufacture must, however, during this century have reached a certain

* Hudson Turner's *Domestic Architecture of the Middle Ages*, p. 78. The glazier's bills are for the repair of a house called Cold Harbour, in London.

† *Breviary of Philosophy*, cap. i.

‡ Fuller's *Worthies of England*, Vol. iii., p. 242. Ed. 1840.

§ *Sussex Arch. Coll.* Vol. i., p. 11. Paper by W. H. Blaauw.

‖ Quoted in Macpherson's *History of Commerce*, Vol. ii. p. 122.

¶ Lansdowne MS. No. 59, Art. 76, quoted in Hudson Turner's *Domestic Architecture*.

** Lansdowne MS. No. 59, Art. 72.

amount of importance, as Richard Hackluyt included in the list of articles which he proposed to be carried with the expedition for the discovery of Cathay eastward in 1580, besides Venice glasses, "Glasses of English making."*

The site of a glass manufactory, apparently of the 16th century, and of which some of the productions seem to have been in the style of Murano, was discovered, in 1860, at Buckholt Farm, in Hampshire, about nine miles from Salisbury.†

About 1615, Sir Robert Maunsell obtained a patented monopoly, not only to make, but to import glass; and owing in great part no doubt to this system of monopolies, and afterwards to the civil war, the making of glass does not appear to have prospered much in England at this time, and we have seen that in 1667 large supplies of drinking-glasses were still imported from Venice.

About 1670, however, the Duke of Buckingham obtained workmen from Murano, and established them at Lambeth; from this manufactory came many of the small mirrors with bevelled edges, which are to be found in old-fashioned houses.

The revocation of the edict of Nantes in 1685, drove a great number of artisans from France, and among them several workers in glass; a great impulse was thus given to the manufacture, and in 1736, as we have seen, the English glass was considered by Dr. Pococke to be superior to that of Bohemia, and only inferior to that made in the Prussian glass-houses, under royal patronage and with unlimited outlay.

In more recent times, a manufactory of glass at Bristol acquired a certain reputation, but its products (see Nos. 911 to 913) are chiefly of a later date than the limit which has been fixed for this essay.

ALEXANDER NESBITT.

* Hackluyt's *Voyages*, Vol. i. p. 496 (ed. 1809).

† *Journal of British Archæological Association*, Vol. xvii., p. 55.

CATALOGUE OF THE COLLECTION.

PART I.

ANCIENT GLASS.

ANCIENT GLASS.

I.—ANTERIOR TO THE CHRISTIAN ERA.

Egyptian and Phœnician.

Fig. 4.

Fig. 5.

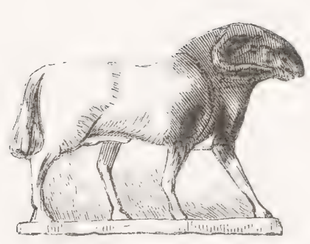


Fig. 1.

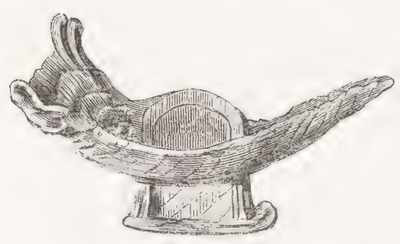


Fig. 2.

Fig. 3.

1. Egyptian Sacred Ram of Amen-Ra, in opaque white glass, having an opaque black glass head and a very dark brownish patch on the shoulders. *Fig.* 1 (*full size*).

2. Egyptian Sacred Boat, perhaps of Socharis, in opaque grey blue glass. *Fig.* 2 (*full size*).

3. Egyptian Sacred Cow of Athor, in opaque grey blue glass. *Fig.* 3 (*full size*).

4. Egyptian Figure, in dark blue glass, representing Ma, the goddess of Truth. *Fig.* 4 (*full size*).

5. Egyptian Figure, in opaque grey blue glass, representing the goddess Nepthys, posed in a squatting attitude, similar to that shown in *Fig.* 4, and having a large head. *Height* $\frac{9}{10}$ *in.*

The glass figures above described are in low relief and plain at the back; they were made to be inlaid in wood or other materials, and not unfrequently

formed portions of hieroglyphical inscriptions. A very remarkable specimen of this kind is preserved in the Museum at Turin; it is part of a wooden sarcophagus with hieroglyphs in Mosaic glass, varied in tint so as to represent the objects in their natural colours. Examples of the plainer kind, from the collection of Dr. Lee, are engraved in the journal of the British Archæological Association, Vol. xiii., Plate 33.

6. Græco-Egyptian Female Deity, (perhaps intended to represent the Heavens,) in grey blue glass, with a loop at the top to serve as a pendant. *Fig.* 5 (*full size*).

7. Fragment of a Cameo remarkable for the thickness of its strata, which are of orange, yellow, blue, and green opaque glass. All that remains of the subject of this rare specimen is the body and arm of a clothed figure, probably that of an Egyptian Divinity. *Size* 1 *in.* by $1\frac{1}{2}$ *in.* (Thibaut Coll.)

8. Cameo, in white on black glass, representing a profile head in low relief, having the hair plaited in stages and the head surmounted with a vase-shaped ornament. Probably a royal personage or a divinity of the Ptolemaic period. *Size* $\frac{3}{4}$ *in.* vertically. (Uzielli Coll.)

9. Egyptian Pendant, in the form of a heart-shaped grotesque mask in relief. It is composed of blue glass, whitish from corrosion, and has a blue nose, above which are projecting dark-blue eyes, encircled with white, and pale yellow eyebrow stripes. *Size* $\frac{3}{4}$ *in.* by $\frac{1}{2}$ *in.*

10. Amphora, of dull blue glass, altogether similar in form to *Fig.* 1, *Coloured Plate* I. It is ornamented with a turquoise lip and a thick spiral band of yellow starting from the shoulder, and becoming gradually wavy, beneath which is a turquoise and yellow zig-zag, bordered with a yellow and a turquoise band. *Height* $2\frac{1}{2}$ *in.*

This and many of the vases described below are probably of Phœnician

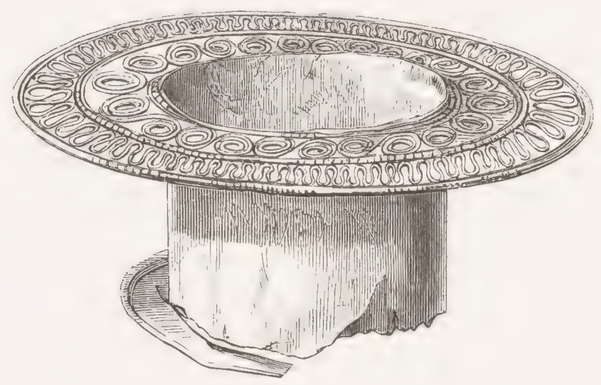


Fig. 6.

origin. Several of them also are of a character requiring a stand to support them upright. A gold stand of the necessary description belonging to the collection is represented by *Fig.* 6. It is for holding a small Amphora having a pointed base, and is similar to one in the British Museum, found together with an Amphora. *Height* $\frac{7}{8}$ *in.*, *diameter* $2\frac{3}{8}$ *in.*

Plate I.

EGYPTIAN & PHŒNICIAN.

11. Amphora, of dark brown glass, similar in form to *Fig.* 1, *Coloured Plate* I.; ornamented with central yellow and turquoise chevrons, or zig-zag pattern, yellow belts, and a yellow-edged lip. *Height* $2\frac{1}{8}$ *in.*

Fig. 7.

12. Œnochoe, of opaque white glass with compressed trefoil lip, etc., ornamented with black chevrons and belts, effectively contrasting with a mother of pearl-like iridescence. *Height* $3\frac{1}{2}$ *in.* (Roussel Coll.) *Fig.* 7.

13. Amphora, of lapis lazuli coloured glass; ornamented with yellow and blue bold chevron pattern, following the course of a series of zig-zag indentations of the surface. *Height* $2\frac{1}{2}$ *in.* Found in the cemetery at Camirus, Rhodes. *Coloured Plate* I. *Fig.* 1.

14. Toilet Vase, used by Egyptian ladies to contain the kohl or stibium with which they painted their eyelids. It is of opaque light blue glass, and in the form of a papyrus sceptre with yellow and white fillets and zig-zag ornaments; in it is a glass rod by means of which the colour was applied. *Length* $3\frac{1}{2}$ *in.* (Rogers Coll.) *Coloured Plate* I. *Fig.* 2.

15. Alabastron, of opaque red glass, like jasper; elaborately ornamented with yellow and turquoise chevron pattern. Probably Egyptian. *Length* $3\frac{3}{4}$ *in.* *Coloured Plate* I. *Fig.* 3.

16. Œnochoe, of dark bluish brown glass; with trefoil lip, and ornamented with chevron pattern, etc., in blue and yellow. *Height* $3\frac{1}{4}$ *in.* (Roussel Coll.) *Coloured Plate* I. *Fig.* 4.

17. Amphora, of dark blue glass, unusually slender and elegant in form and having two diminutive projections on the shoulders for handles. It is

beautifully ornamented and delicately iridised. (Roussel Coll.) *Coloured Plate* II. *Fig.* 2.

18. Amphora, of light blue glass; ornamented with a zone of delicately indented chevrons, in yellow and white. The corroded surface of this beautiful vase imparts to it a peculiar opaque appearance, very similar to that of pottery. *Height* 3 *in.* (Roussel Coll.) *Coloured Plate* II. *Fig.* 3.

19. Amphora, of deep blue glass with polished surface and flattened form, resting on two diminutive feet of blue and white glass. It is ornamented with a palmette pattern. *Height* $3\frac{1}{2}$ *in.*, *width* $2\frac{3}{4}$ *in.* *Coloured Plate* II. *Fig.* 4.

20. Amphora, of deep green glass similar in form to *Fig.* 3, *Coloured Plate* II., but slightly more tapering, and ornamented with a zone of yellow chevrons, terminating with a turquoise zig-zag, above which is a yellow belt, and beneath a yellow and a turquoise belt. *Height* $3\frac{1}{2}$ *in.* (Roussel Coll.)

21. Amphora, of blue glass of a deep sapphire colour, in form like the preceding, but much more tapering, and having close vertical flutings. It is ornamented with a very wide zone of elegant, uniform, and elaborate chevrons, composed of alternate thin yellow and broad turquoise zig-zags, with yellow belts above and below, and others encircling the neck and lip. *Height* $3\frac{3}{4}$ *in.*

Fig. 8.

22. Amphora, of opaque milk-white glass, ornamented with flutings and a bold violet chevron pattern, covered with metallic greenish iridescence. *Height* 5 *in.* (Roussel Coll.) *Fig.* 8.

PHŒNICIAN & ROMANO-EGYPTIAN.

23. Alabastron, of dark chocolate coloured glass, in form similar to *Fig.* 3, *Coloured Plate* I.; ornamented with an effectively varied alternate turquoise and white wavy and zig-zag pattern. *Length* 5 *in.*

24. Alabastron, of deep blue glass, the ground colour being but barely visible on account of the mingled brilliant golden and pearly green iridescence which almost entirely covers the surface; it is ornamented with white and yellow chevron pattern relieved by the blue. This and the following Alabastrons, excepting No. 31, are much less regular in form than the two previously described. *Length* $4\frac{3}{8}$ *in.* (Roussel Coll.) *Fig.* 9.

Fig. 9.

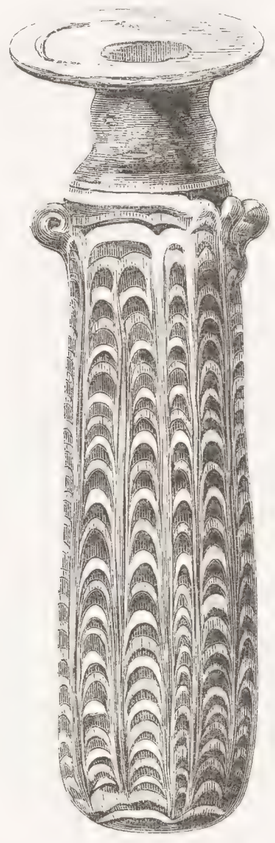


Fig. 10.

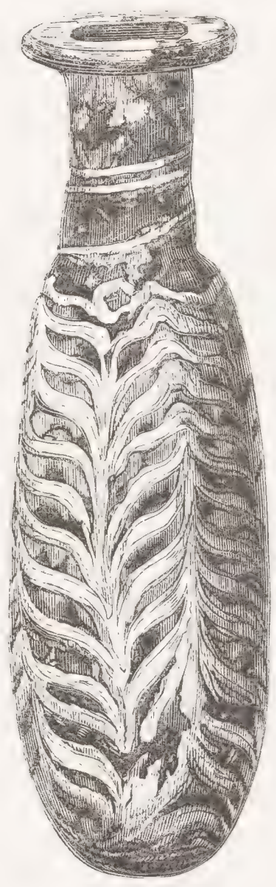


Fig. 11.

25. Alabastron, of dark blue glass, with unusually diminutive side handles, and ornamented with vertical indentations, between which are vertical bands of small irregular scallops in white and yellow enamel, relieved by the blue, which in places is now effectively varied in colour through corrosion. *Length* $4\frac{3}{4}$ *in.* (Roussel Coll.) *Fig.* 10.

26. Alabastron, of dark blue glass, without handles; ornamented with a bold palmette pattern of decayed yellow coloured enamel, all much corroded. *Length* $4\frac{7}{8}$ *in. Fig.* 11.

27. Alabastron, of deep blue semi-transparent glass, and similar in form to *Fig.* 9, but tapering regularly. It is ornamented with an emerald rim, and a spiral yellow stripe changing about half-way down into a zig-zag stripe, alternately blue and emerald, and terminating with a yellow and an emerald ring. *Length* $4\frac{1}{2}$ *in.*

28. Alabastron, of dark lapis lazuli glass, similar to *Fig.* 9 in form and the character and arrangement of its ornament which is in yellow and turquoise enamel. *Length* 4 *in.*

29. Alabastron, of opaque milk-white glass, in shape similar to *Fig.* 9, but more cylindrical; ornamented with dark purple bands of chevron pattern, above and beneath which are encircling belts. *Length* $3\frac{7}{8}$ *in.* Found by M. Salzmann in the cemetery at Camirus in Rhodes.

30. Alabastron, of deep blue glass, in shape similar to *Fig.* 9, but more cylindrical, and having vertical flutings; ornamented with bold chevron pattern, sharply indented and coloured with turquoise and yellow enamel. *Length* 5 *in.* (Roussel Coll.)

31. Alabastron, of dark green glass, similar in form to *Fig.* 3, *Coloured Plate* I.; the lip is edged with yellow, and the body covered, as in that specimen, with a yellow and light blue zig-zag pattern. *Length* $3\frac{3}{4}$ *in.* (Roussel Coll.).

32. Alabastron, of plain opaque white glass having a pinkish hue, and similar in form to *Fig.* 9, but tapering regularly upwards without ornament. *Length* $5\frac{3}{8}$ *in.* (Roussel Coll.)

This is evidently an imitation of the vases of Arragonite or Egyptian alabaster.

33. Miniature Ewer, of deep blue glass, with handle, lip, and neck fillet, and pointed base, all of pale yellow glass. *Length* 1 *in.*

This and the following diminutive specimen are probably Egyptian of the Ptolemaic period.

34. Miniature Ewer, of black glass, with a handle; ornamented with a long pointed white and blue zig-zag chevron pattern round the centre of the body, and a spiral thread round the neck. *Length* 1 *in.*

35. Amphora, of a beautiful deep blue semi-transparent glass. It has been originally ornamented with a yellow and turquoise palmette pattern of which the indentations now alone remain; the cavities serve to show that the ornamentation did not enter very deeply into the glass. *Height* $4\frac{1}{2}$ *in.* (Roussel Coll.) *Fig.* 12.

36. Œnochoe, of bright blue glass, with compressed trefoil lip and large handle; ornamented with vertical bands of zig-zag designs in light blue, white, and yellow enamel forming a kind of palmette pattern; a raised yellow spiral thread encircles the neck, mouth, and foot, and the colours are beautifully preserved on a highly polished ground. *Height* $5\frac{1}{2}$ *in.* (Roussel Coll.) *Fig.* 13.

37. Œnochoe, of lapis lazuli coloured glass, with compressed lip, etc.; ornamented with a palmette pattern in yellow, silvery, and turquoise enamel; a delicate yellow spiral thread encircles the neck, the lip and the foot being edged with the same colour. *Height* $5\frac{5}{8}$ *in.* (Roussel Coll.) *Fig.* 14.

38. Amphora, of transparent dark blue glass, one side of which is polished, the other iridescent; ornamented with belts and vertical bands of palmette pattern in opaque white enamel. *Length* 6 *in.* *Fig.* 15.

39. Œnochoe, of dark blue glass, with trefoil lip and ribbed handle, very

PLATE II.

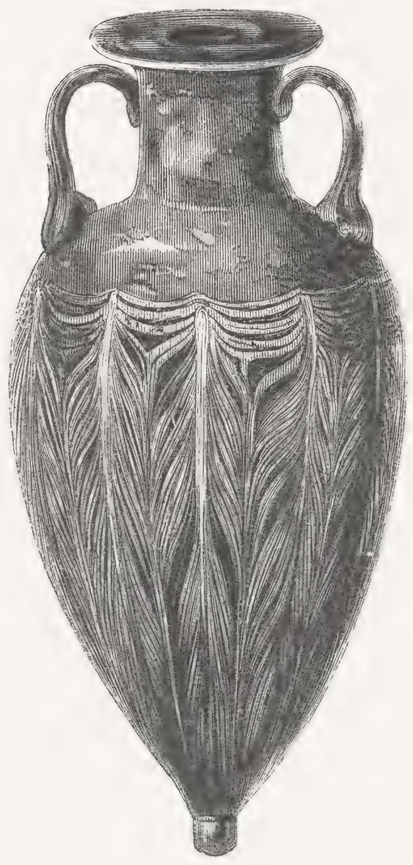


Fig. 12.

Fig. 13.

Fig. 15.

Fig. 14.

PHŒNICIAN GLASS.

similar in form and decoration to *Fig.* 14; but with yellow and white palmette ornament, and covered round the neck and handle with a peculiar silvery and greenish iridescence effectively contrasting with the dark blue glass. *Height* 6 *in.*

Fig. 16.

40. Œnochoe, of deep blue glass, with trefoil lip, etc.: ornamented with opaque white zig-zags round the centre of the body; with white, yellow, and turquoise belts above and below; and with raised yellow threads encircling the neck, lip, and foot. *Height* $4\frac{1}{2}$ *in.* (Roussel Coll.) *Fig.* 16.

41. Ten Buttons, of blue glass; some ornamented with white, and others with yellow enamel, variegating their upper sides either with encircling branches of looplets, so as to resemble a palm branch, or with zig-zagging spiral lines. *Diameter* $\frac{3}{4}$ *in.*

42. Three Buttons, of black glass, ornamented like the preceding specimens and similar to them in size.

43. Curious Bead, of whitish amber glass; unperforated, wheel-shaped, and ornamented on one side with a white rosette formed of looplets radiating from a raised central point, and breaking off into a white spiral line marked on its last fold with a series of index points. *Diameter* $1\frac{1}{4}$ *in.*

44. Large Bead, or spindle whorl, of green glass, ornamented with a beautifully flowing festoon pattern, in whitish grey enamel, encircling the object spirally on one side and in branches on the opposite side, in both cases starting from the central orifice. Through the centre is a large perforation about half an inch deep. *Diameter* $1\frac{1}{2}$ *in.*

45. Bead, of grey opaque glass. This singular bead has an orifice half an inch in diameter, and is covered with white annulets surrounding dark blue spots or eyes running in diagonal rows. *Diameter* $\frac{7}{8}$ *in.*

46. Bead, of dark brown glass and conical form, with deep vertically scalloped rim; ornamented with wavy bands of yellow enamel and perforated. *Fig.* 17 (*full size*).

47. Bead, of green glass, with brown cartouches on which are small blue spots encircled with white. *Fig.* 18 (*full size*).

48. Bead, of blue glass, variegated with white broken circlets following the spiral form of the object. *Fig.* 19 (*full size*).

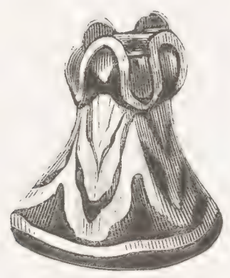


Fig. 17.

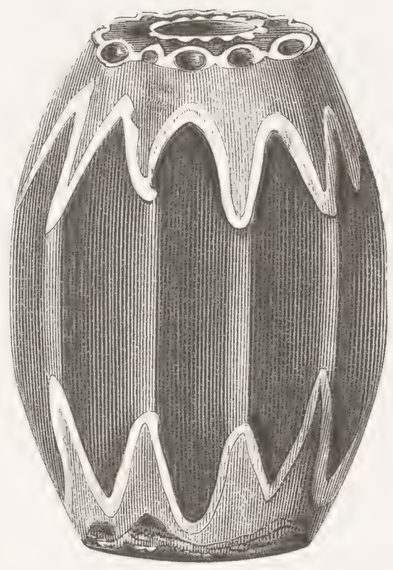


Fig. 18.

Fig. 19.

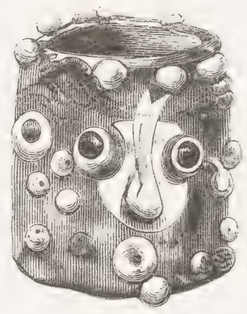


Fig. 20.

Fig. 21.

49. Bead, of blue glass (probably of Egyptian workmanship); ornamented with raised yellow and white enamel pellets, etc., forming grotesque faces round the centre. *Fig.* 20 (*full size*).

50. Oval Bead, formed from a section of a cane bevelled off at each end so as to disclose the patterns. At each end is a star-like design of transparent glass edged with opaque white glass; outside the stars are boldly indented bands of opaque red with white margins, enclosing a broad central zone of dark transparent blue glass, which completes the pattern. The perforation has a lining of opaque white glass. *Fig.* 21 (*full size*).

The exact age of beads of this kind has not as yet been determined. A specimen, found in Egypt, is in the British Museum, where is preserved another stated to have been found in England, and referred to the Britons or Saxons. One found at Beverley, near Dundas, Canada West, has been published in the Proceedings of the American Philosophical Society, (November, 1862, p. 111), with a communication from M. Morlot of Lausanne, who attempts, on the authority of

the bead, to establish a synchronism between the copper age of North America and the Phœnicians. It may be remarked that about 9 inches of a rod for making beads of this identical pattern is preserved in the British Museum, which has all the appearance of being Venetian, proving, at any rate, that the making of such beads was continued down to a late time. See Proceedings of the Society of Antiquaries, 2nd Series, Vol. ii. p. 334. A bead of the same kind, stated to have been found near Southampton, is engraved in the Journal of the British Archæological Association, Vol. iii. p. 328.

51. Bead, of dark blue glass, very similar in form to *Fig.* 17, but with a plain top rim. It is also rather larger and more pear-shaped in form, and ornamented more profusely with diagonal and horizontal wavy bands of yellow and white enamel.

52. Bead, rather smaller than the preceding but possessing similar characteristics.

53. Bead, of brown glass, with white cartouches on which are small grey round spots. *Fig.* 18 conveys an idea of this bead.

54. Bead, of opaque green glass, of the same size as *Fig.* 20; ornamented with central raised blue disks surrounded with two white circles, and having a double row of white and yellow raised pellets encircling the specimen above and below them.

55. Bead, of black glass with three vertical yellow annulets, each containing a very small central one. *Diameter* about $\frac{5}{8}$ *in.*

56. Cylindrical Bead, of dark opaque green glass; a fine and elegant specimen, ornamented with irregular waves, and having an exquisite metallic green and silvery iridescence. *Length* 2 *in.*

57. Thick Ring, of black glass diagonally striped with encircling bands of opaque yellow. *Diameter* $1\frac{1}{4}$ *in.*

58. Flat Button, of dark opaque glass, having the top ornamented with white lines radiating from its centre and terminating in a white marginal belt. *Diameter* $\frac{7}{8}$ *in.*

59. Two small Cones, of dark blue glass, each encircled with a thick yellow spiral stripe. *Diameter* $1\frac{1}{4}$ *in.*

60. Pendant Bead, in the form of a mask, having the nose and forehead yellow, the lips white, and the rest mainly blue. This is not so rude or grotesque in expression as usual. *Size* about $\frac{3}{4}$ *in.*

61. Pendant, of blue glass, on each side of which is a bust in relief, with the hair disposed in one large curl passing over the top of the head and down each side of the face in a horse-shoe form. Probably Græco-Egyptian. *Length* about $\frac{7}{8}$ *in.* (Rogers Coll.)

62. Curious Pendant, in opaque blue glass covered with a whitish corrosion, and having in relief the bearded face of an old man on each side with the hair and beard waved. From beneath the chin a hole extends upwards. Probably Græco-Egyptian. *Length* $\frac{7}{8}$ *in.*

63. Pair of Armlets, of transparent deep blue glass, each mounted at the open ends with pressed gold ornaments, representing the fore part of a lion, and a fir cone, and having a gold sliding ring to fasten it to the arm and prevent its falling to the ground. Found in a tomb at Rome, but probably of Phœnician origin. (Rogers Coll.) *Fig.* 22 (*full size*).

Figs. 22 *to* 24.

64. Pair of Earrings, of turquoise blue glass; round the outer edge is a raised border of twisted white and violet glass, and the ends are pierced for wires to fasten them in the ear. Probably from Egypt. *Diameter* 1 *in.* (Rogers Coll.) *Fig.* 23.

65. Necklace of variegated glass beads, all inlaid with different coloured enamels in flat and projecting circles and spots, etc., minutely and beautifully worked, and having pendants attached to them in the form of grotesque heads, etc. It was found in the Necropolis at Tharros, in Sardinia, and is probably of Phœnician manufacture. (From the Barbetti Coll.). *See Fig.* 24 for specimens of these beads.

66. Necklace, of very pale blue ribbed beads of opaque paste, like *b*, *Fig.* 24. Between the beads are gold ornaments, resembling anemones, with fir-cone pendants (*a*, *Fig.* 24), alternating with small gorgon heads; in the centre is a female bust of gold, with her hair turned back, earrings of a triangular shape, and a twisted neck-chain from which is suspended a crescent-shaped bulla. The beads may be of Egyptian origin. (Rogers Coll.)

67. Necklace, of plain glass beads of various colours, forms, and sizes, with intermediate ribbed gold beads and gold mounted pendants of glass, no doubt intended to imitate precious stones, the surfaces of which are beautifully iridescent. Found in the Necropolis at Tharros in Sardinia, and probably of Phœnician origin. (Barbetti Coll.) *See c, Fig.* 24.

68. Plaque, of opaque green glass, in two pieces; ornamented in mosaic work, with a quaint head, having a large bushy red wig, bound with a yellow fillet, surrounding a white face the features of which are outlined in black and of a conventional Egyptian character. This specimen is made of rods of coloured glass, so placed as to form the subject when fused together and the mass is then sliced into sections. In this instance only half the face was made, and the perfect image produced by placing the under side of one slice against the upper side of another. (Rogers Coll.) *Diameter* $1\frac{1}{4}$ *in.*

69. A Medallion, representing in Mosaic, on a disk of turquoise glass, a Tragic Mask with a large red wig, the features and curls of which are outlined in black. The perfect figure of this was produced like that of the preceding. (Thibaut Coll.) *Coloured Plate* IV. *Fig.* 1 (*full size*).

70. Square Mosaic, of lapis lazuli glass, containing the figure of a hawk coloured in imitation of the natural plumage. This specimen appears to have been sliced off from a thicker piece of glass. *Coloured Plate* IV. *Fig.* 2 (*full size.*)

71. Pendant of yellowish glass. On each side of this beautiful specimen is embossed a female full-faced head, in high relief, having two rows of curls round the face, and reaching to the shoulders; on the forehead is a diadem, and round the neck a string of beads. This splendid object has a remarkably brilliant golden and metallic green-hued surface on one side, and a mother-of-pearl-hued iridescence on the other. It was found in Sardinia. *Coloured Plate* IV. *Fig.* 3 (*full size*).

A similar specimen was brought from an Egyptian tomb in Thebes by Mr. Banks, and is represented in Apsley Pellatt's "Curiosities of Glass Making." Plate 2, fig. 3.

II.—FROM THE CHRISTIAN ERA UNTIL A.D. 400.

A. Romano-Egyptian and Roman Mosaic and Variegated Glass.

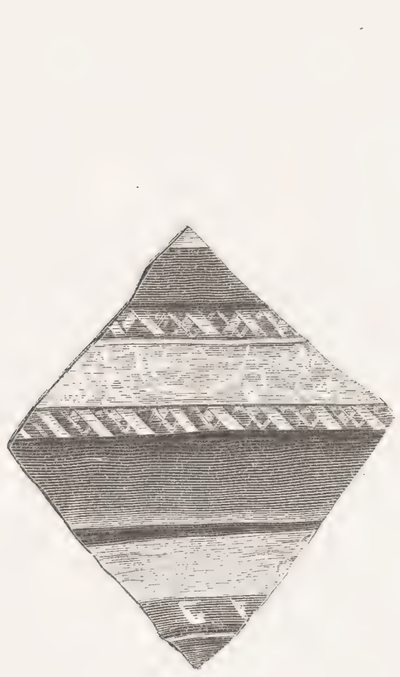


Fig. 25.

Fig. 26.

Fig. 27.

72. Fragment Specimens, consisting of twenty-two portions of Romano-Egyptian and Roman transparent and semi-transparent variegated cups and bowls, etc., of exquisite manufacture. The patterns are composed of broad canes, of different coloured glass, laid vertically, horizontally, diagonally, or curved. Sometimes these canes are separated by bands of powdered gold, and also by minute and spirally-twisted threads of blue, white, or yellow, like the Venetian *latticinio à ritorti*. *Coloured Plate* III. *Fig.* 2. One of the specimens is decorated with a layer of delicate silvery-like irregular filigree on a red band, as indicated in *Fig.* 25, and the margins of many of them display twisted coloured threads, embedded in transparent glass.

73. Fragment Specimens, consisting of six pieces of ancient lace glass, ornamented with bands of opaque white and yellow threads, having a golden and silvery appearance, some of which lie between bands of semi-transparent blue, red, and green glass. Presented by A. Nesbitt, Esq.

74. Fragment Specimens, consisting of upwards of fifty portions of Romano-Egyptian and Roman opaque, and semi-transparent, glass cups, bowls, and plates, many of which are ornamented in imitation of the onyx, others in the manner indicated in *Fig.* 26, and others in imitation of schmeltz, as *Fig.* 1, *Coloured Plate* III.; whilst some of them are of a millefiori character, the pattern

ROMANO-EGYPTIAN & ROMAN.

in each case having been produced by fusing either variegated welded rods, or else a combination of canes of different coloured glass, together in a body of transparent or other glass. The transparent specimens when held to the light appear of dark amber, brown, or violet; and all are marbled, veined, or streaked with white, blue, brown, and yellow, singly or in combination, so as to surpass in instances the beauty and variety of the sard-onyx itself. A portion of a plate, with an opaque red ground colour streaked with white, is represented in *Fig.* 27.

75. Bottle, or Alabastron without a lip, of emerald green glass, brilliantly ornamented with various colours. The pattern may be described as a series of deeply indented wavy lines running irregularly along the vessel; these chevrons are formed of dark blue bands, ornamented with a central white thread, separated by much wider bands, composed of powdered gold, bordering a bright, deep emerald centre and partially sprinkling it. This specimen is a remarkable instance of skilful workmanship, most probably Romano-Egyptian, and, like the following, is of extreme rarity. *Coloured Plate* III. *Fig.* 3 (*full size*).

76. Ampulla, formed of glass of various colours, intermingled with gold. In this rare specimen the gold particles are embedded in clear or colourless glass. Found near Naples. *Height* $2\frac{1}{8}$ *in.* (Roussel Coll.) *Coloured Plate* II. *Fig.* 1.

77. Oval Tablet of lapis lazuli glass with an inlaid vine-leaf, composed of a stalk and outline formed of minute gold fillets the interstices between which are filled in with green enamel. It will be found that gems of this class are generally backed or cased with a substratum of opaque white enamel, which serves to throw up the brilliant hue of the upper layer of transparent glass, and perhaps to strengthen the superincumbent mosaic. In manufacturing this fine specimen, a *chef d'œuvre* of ancient art, the white substratum formed the groundwork; the gold *cloisons* having been arranged in the required design, and fastened at their lower edge to the surface, the coloured enamel was then placed in its proper cells, and fused exactly in the same manner as were the cloisonné enamels, a process doubtless the prototype of this kind of work, the only difference of procedure between them having been that of employing a glass instead of a metal plate. It is set in gold as a ring. (Hertz Coll.) *Coloured Plate* III. *Fig.* 4 (*full size*).

78. Oval Tablet of lapis lazuli glass backed with opaque white, and inlaid with solid gold, as in the preceding specimen, so as to form a bird standing on a flower-stalk. It is set in gold as a ring. *Length* $\frac{5}{8}$ *in.* (Hertz Coll.) *Coloured Plate* III. *Fig.* 5 (*full size*).

79. Circular Tablet, of material and workmanship like the preceding; but inlaid with red, yellow and green enamel to represent a parrot. Mounted in gold as a ring. *Length* $\frac{3}{4}$ *in.* (Hertz Coll.)

80. Quadrangular Tablet, similar to the last named; but with the red decayed, and having gold outlined flowerets at each corner of the tablet. *Size* $\frac{3}{4}$ *in. by* $\frac{5}{8}$ *in.* (Thibaut Coll.)

81. Circular Medallion, like the preceding; but smaller, and with the enamel decayed away from the bird. *Diameter* $\frac{1}{2}$ *in.* (Thibaut Coll.)

82. Circular Medallion, like the preceding; but inlaid with a bunch of vine leaves, in colours now obliterated through the action of a beautiful silvery white decay which entirely fills the device. *Diameter* $\frac{1}{2}$ *in.*

83. Fragment of *Lapis Lazuli Glass*, with inlaid star-shaped flower and other ornaments, the original colours of which are covered with a silvery corrosion. *Size* and form somewhat similar to *Fig.* 9, *Coloured Plate* IV.

84. Enamelled Medallion. This rare and remarkable specimen is composed of a delicate azure blue glass, with a thick coating of opaque white glass on one side, on which is painted, in brown colour, a finished masterly outline of a gryphon, having elevated wings and its left front paw resting on or holding a slightly-curved stem with a funnel-shaped open top. A fine example of the process of enamel work on glass, to which allusion is made in the preliminary essay. Found in Sardinia. *Diameter* $1\frac{3}{4}$ in.

Fig. 28.

85. Large Jug, of amber coloured glass, ornamented with superficially embedded irregular and elongated splashes of white enamel (as are some of the specimens under No. 99), and which, probably, were jerked on to the first bubble forming the vessel, instead of being produced by a combination of

glass rods. The handle, of dark amber, is beautifully manipulated into three bold raised ribs resting like claws upon the body. This magnificent and highly important specimen is quite perfect, and was found in one of the islands of the Archipelago, by M. Péretié, French vice-consul for Syria. *Height* $9\frac{1}{2}$ *in.* *Fig.* 28.

86. Bowl of millefiori glass; it has a brilliant greenish blue ground, and is exquisitely ornamented with sectional cuttings of variegated canes of glass, fused together in an elegantly diversified millefiori pattern formed of stars or rosettes of green, with yellow rays, and blue and white eyes, relieved by angular patches of blue, white, orange, and powdered gold glass, combined with pipes of latticinio. The margin is bordered with a dark amber band. The vessel tapers conically towards the base, and is covered with an oxydised patina, resulting from age; a small portion of it, however, has been polished, to show the pattern and the original brilliancy of its colours. It has been much injured, but not sufficiently to prevent the perfect restoration of the form. *Height* $3\frac{1}{2}$ *in.*, *Diameter* $6\frac{1}{4}$ *in.* (Uzielli Coll.)

87. Bowl, of dark amber glass, ornamented with embedded curling scroll-like forms, somewhat like those indicated in *Fig.* 26, but more fully and regularly enfolded or curled, and exhibiting a peculiar appearance of recession; many also are of a semi-transparent whitish colour, like an onion shred, others gradate into a brownish hue, and intermingled with the mass are angular tablets of opaque blue, light green and grey white glass. Round the margin is a narrow, regular, white twist, and the scrolls on the external surface are more intricately and curiously intermingled than those on the interior. Finer examples of remarkably skilful workmanship than this and the preceding vessel could hardly be met with. *Height* $1\frac{1}{4}$ *in.*, *Diameter* $5\frac{1}{8}$ *in.*

88. Fragment of Bowl, consisting of about three-fourths of a fine specimen of a ribbed shallow bowl, strikingly ornamented with irregular small wavy horizontal streakings, in purple and opaque white colours, producing the semblance of a large decayed shell which has been embedded in chalk or lime. Found at Cologne. *Height* $1\frac{5}{8}$ *in.*, *Diameter* $4\frac{1}{4}$ *in.*

89. Square Glass Slab, with the surface ornamented so as to appear somewhat like the section of a madrepore. The colours on this specimen are irregularly disposed in rib-like cells, but are either varied or concealed by the beautiful iridescence, covering its surface, the prevailing hues of which are a very delicate golden, silvery, blue, green, and violet. *Size about* $2\frac{7}{8}$ *in. square.* (Roussel Coll.)

90. Slab of mosaic glass polished; ornamented with an irregular large network, formed of linked squares, each composed of nine minute quadrangular canes, a white central one surrounded by eight others alternately black and yellow; enclosed between nearly every four of these composite squares is an angular mass of opaque red ground. *Size* 3 *in. by* 2 *in.* (Roussel Coll.)

91. Small Medallion, of light green glass, containing a mosaic representation of a quaint round white face, surmounted with a curious red head-dress. *Diameter* $\frac{1}{2}$ *in.*

This is a specimen of mosaic glass, similar to No. 68; but in the present

instance the section of the rod or cane presents a figure of the whole mask in one piece, and probably from the section being taken from the end portion of the cane the mask has an indistinct appearance.

92. Square Tablet of Mosaic glass, on which is represented a white face, surrounded with ringlets, and having a plain turquoise and red enamel bordering, outside which is a narrow strip of lapis lazuli glass; the whole is backed or cased, and produced as the preceding. *Size of the mosaic* $3\frac{1}{2}$ *in. square.* It is set in gold, and is very probably Romano-Egyptian.

93. Square Tablet of opaque emerald green glass, in which is embedded a white face surrounded with green ringlets and lying on a blue ground relieved by an outer border of the emerald green. *Size* $\frac{5}{8}$ *in. by* $\frac{1}{2}$ *in.*

94. Small Mosaic Heads; two miniature specimens, one of which is similar in size and character to a specimen (depicted in Pellatt, Plate 2 fig. 12) found in a tomb at Thebes, and the other an equally small mosaic, backed with opaque glass. Both these curious examples present front faces in opaque white glass, surrounded with white radiating points, to represent the hair, outside of which is a belt of opaque white glass, and the whole is embedded in transparent green glass.

95. Two Mosaic Fragments of elegant border-work, formed of vases, fruit, beaded festoons, scroll, ornaments, etc., of various colours, on blue ground; probably products of the Alexandrian glass works, under the Roman Empire. *Coloured Plate* IV. *Fig.* 4 (*full size*). (Thibaut Coll.)

A similar specimen figured in Pellatt's work (Plate 6 fig. 7), is described as "a beautiful exemplification of the art of making pictures of glass, with various coloured threads, fused together, by means of which elegant arabesque designs were produced by the ancients."

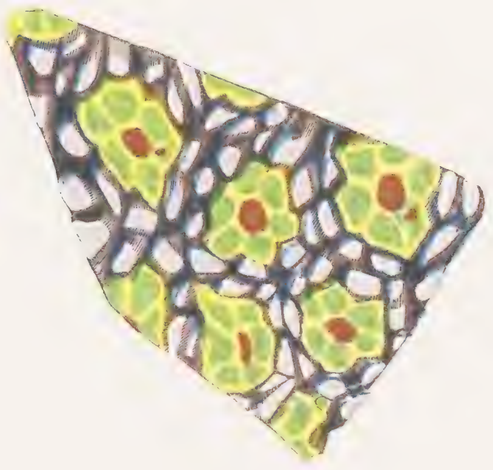
96. Five Mosaic Fragments, consisting of fine specimens of coloured glass, ornamented with flowers, leaves, and stems, composed of sectional filaments on dark ground, and displaying delicate manipulation with exquisite combination of colours. (Thibaut Coll.) *Coloured Plate* IV. *Figs.* 5 *and* 6 (*full size*).

97. Circular Medallion, of mosaic work, containing a centre rosette ornament bordered with a red and with a yellow band of wave pattern. The colours employed in this minute specimen are dark and light blue, yellow, red, and black. (Fould Coll.) *Coloured Plate* IV. *Fig.* 7 (*full size*).

98. Mosaic Fragments, consisting of two oblong specimens of a beautiful diaper pattern, containing fillets composed of red, white, black, and grey glass stripes on which are minute flowers, and having a yellow and green stripe between each fillet. *Coloured Plate* IV. *Fig.* 8 (*full size*).

Similar designs fused to copper were employed in Roman enamels, especially in circular brooches or studs; *see* Lee, "Isca Silurum," Plate xxviii. fig. 14; "Collectanea Antiqua," Vol. iii. Plate xxxv.

99. Fragment Specimens, consisting of one hundred and thirty portions of Romano-Egyptian and Roman cups, bowls, and pateræ of mosaic glass. The devices are composed of coloured rods and tubes of glass arranged in patterns and



EGYPTIAN & ROMAN MOSAIC GLASS.

fused together, then cut off in sections and placed edgeways in a paraison, or body of semi-transparent glass, and blown into the required form. The patterns are as varied as the tints employed. They consist, firstly, of regular devices of chequers, (*Coloured Plate* IV. *Fig.* 9, *full size*), quatrefoils, stars, rosettes, diaper work, and hexagonal cane-work enclosing flowers, etc., of minute form; and, secondly, of irregular devices, some displaying peculiar combinations of small thin tubes of various coloured glass-like masses of cut reeds (*Coloured Plate* IV. *Fig.* 10, *full size*), and others showing combinations of rods in effect somewhat resembling sectional cuttings of such fruits as the gooseberry. (*Coloured Plate* IV. *Fig.* 11.) These fragments are not ornamented merely on the surface, but the pattern penetrates throughout the substance, exhibiting the same device on both sides.

100. Mosaic Fragment, showing a larger and more geometric design than either of the preceding, and cased with a clear greenish glass. *Coloured Plate* IV. *Fig.* 12 (*full size*).

101. Mosaic Fragment, showing a pattern formed by a series of scales, with yellow glass outlines, in rows filled in respectively with red, black, and then green and black opaque glass. *Size about* $1\frac{1}{2}$ *in.* by $\frac{3}{4}$.

This probably represents the wing of an Egyptian figure, not impossibly the Soul, as shown on the breast of mummies; unquestionably of this character is a similar specimen in the British Museum figured in Pellatt's work, Plate 3 fig. 9.

102. Circular Mosaic, of blue glass; with ornament of a character similar to the centre of *Fig.* 7, *Coloured Plate* IV., and having a narrow opaque yellow edging. *Diameter* $1\frac{1}{8}$ *in.* Romano-Egyptian. (Thibaut Coll.)

103. Two Mosaic Tablets, each of blue glass and square, with ornament of a character similar to that of the preceding, but simpler, bolder, and brighter, and having leaflet sprays of white, red and green, radiating from the centre to the four corners. *Size* 1 *in. square.* (Thibaut Coll.)

A similar specimen, found in Egypt, is engraved in Wilkinson's "Manners and Customs of the Egyptians," Vol. iii. Plate xvii. fig. 5.

104. Oblong Mosaic Tablet, of blue glass, cased with transparent white glass. It is ornamented with a chain band, festooning from a central point, and formed of twenty-three minute links, each of which has a delicate yellow outline, and is filled in with a brownish red glass. On the central point is a flower, composed of four fan-shaped petals, with yellow eyes and thick red borders, and two similar but larger flowers hang from two outward curving white scrolls, which rise from the festoon one on each side of the centre. This effective design was evidently produced and perfected by the process described in No. 68. *Size* $1\frac{1}{2}$ *in. by* $\frac{3}{4}$ *in.*

105. Fragment Specimens, of glass slabs, such as were used for covering the walls of Roman dwellings. These are of opaque coloured glass, veined to imitate rare marbles, as jasper, rosso, giallo antico, verde antico, etc. On examination, it will be found that all the colours are welded together and show the patterns on both sides.

106. Various Specimens, of opaque glass of single colours, in imitation of jasper and precious marbles. Many of these plaques have been originally arranged in geometrical patterns against the wall; some are leaf-shaped, etc. *The average thickness is from* $\frac{1}{2}$ *to* $\frac{3}{4}$ *of an inch.*

107. Pastes, ninety-five in number, of transparent and opaque glass in imitation of amethysts, peridots, turquoises, lapis lazuli, and other precious stones, the larger number of which are polished, whilst many are veined in imitation of natural stones.

108. Ampulla, of light blue glass, with spherical body and short neck, something similar in form to *Fig.* 1 *Coloured Plate* II., and ornamented so as to appear like grey marble, with wavy, streaky, and dotted irregular bands of white. *Height* $2\frac{1}{2}$ *in.*

109. Ampulla, of dark blue glass, similar in form to the preceding, but ornamented or marbled with bolder curving streaky and dotted irregular bands of white. *Height* 2 *in.*

110. Ampulla, of amber glass, spherical and encircled with broad, white, spiral, irregular bands, and beautifully waved. *Height* $1\frac{1}{2}$ *in.*

111. Ampulla, of blue glass, with pear-shaped body and long neck; ornamented with white, irregular, vertical stripes. *Height* $2\frac{5}{8}$ *in.*

Fig. 29.

112. Amphora, of dull blue glass, ornamented with opaque white festoons, and having two delicate side handles. This and the ornamentally-marbled and veined specimens of glass vessels were probably blown into their various forms from a *metal* that had been previously variegated or produced by the fusion together of different kinds of glass into a common mass. *Height* $4\frac{1}{2}$ *in. Fig.* 29.

113. Bowl, of blue glass, particularly brilliant at the lower part, and beautifully variegated. Its form resembles Fig. 2 Coloured Plate VI., but it is shallower and far more elegant in its proportions, and ornamented with a series of delicate vertical rib-like projections, regular in order, and probably produced by the ancient process of glass pillar moulding, alluded to in No. 203. These ribs, also, are strikingly variegated, either by accident or design, with small V shaped opaque white decorations, imparting to them the appearance of arrows with side and end featherings, and from these a very broad spiral opaque white band curls round the base of the vessel. *Height* $2\frac{3}{4}$ *in.* *Diameter* $3\frac{3}{4}$ *in.* (Roussel Coll.)

The fine quality of this and other descriptions of ancient variegated coloured glass is mentioned by Mr. Pellatt, in his "Curiosities of Glass Making" in the following terms:—"The beauty, variety, and arrangement of colours, not only place ancient glass manufacturers high in our estimation as to taste and design, but the knowledge of the chemical art in opaque and transparent colouring which they evince; deserves to be appreciated, particularly their blues without cobalt or nickel, and their reds without gold."

114. Urn-shaped Vase, of variegated violet glass, veined in imitation of onyx, delicate in fabric, and lathe marked. In form it is similar to *Fig.* 52, without the zig-zag fillet, and the veins or *streakings* on its surface curl spirally round the vessel in broad and thin silvery looking bands gradating into purple violet. *Height* $4\frac{1}{2}$ *in.* *Diameter* $3\frac{1}{2}$ *in.* (Roussel Coll.)

115. Ampulla, of blue glass. This brilliant looking specimen is ornamented with opaque yellowish and white enamel bands, between which the surface is covered with a very metallic orange and bright green iridescence. *Height* $3\frac{1}{8}$ *in.* *Coloured Plate* VII. *Fig.* 1.

116. Large Bead, of unpierced brilliant green glass, flattened, or wheel shaped, and ornamented with an embedded series of encircling white lines. Found in a field in England. *Diameter* 2 *in.*

117. Hollow Ball, or sphere of blue glass, having a small hole at one extremity, and a series of thickish embedded white lines encircling it. It is remarkably thin and light, and iridescent. *Diameter* $1\frac{3}{4}$ *in.* From Xante.

118. Hair Pin, (acus crinalis), of colourless glass; ornamented with an encircling spiral stripe composed of three yellow enamel threads. On the top is a button, and the pointed end is broken. *Length* $5\frac{3}{4}$ *in.*

119. Hair Pin, or bodkin of blue glass, having a spear-shaped end pierced through the centre, and elegantly striped with a series of thin white lines like twisted ribbon. *Length* 6 *in.* (Uzielli Coll.)

120. Fragment of a Christian Glass Vessel, with the letters ZHCAIC (*may you live*) in thick gold capital characters, which seem to be on the surface of the glass. *Size* $1\frac{1}{4}$ *in. by* $\frac{3}{4}$ *in.*

This and the following specimen are of interest as showing how the gold devices were applied to the early Christian ornamented glass vessels, of which they illustrate two modes of decoration. The most remarkable specimens

known to exist are represented in the work by Padre Garrucci, "Vetri Cristiano," etc.

121. Fragment of Christian Glass, colourless, containing gold ornamentation embedded in its interior, consisting of part of a circular scolloped bordering. *Length* 1 *in.*

B. ROMAN CAMEO AND INTAGLIO GLASS.

Fig. 30.

122. Medallion, of opaque light blue glass, backed with transparent glass behind which is a thin film of the opaque blue glass. This, probably, is a specimen of glass pressed into a metal mould; it represents the head of Medusa, in relief, with the hair radiating in snaky locks from the face, and having two small wings projecting from the forehead. *Diameter* $1\frac{3}{4}$ *in.* (Fould Coll.) *See Fig.* 30.

Medallions with this device and other cognate subjects are not uncommon. In one instance, a similar medallion was found with a bronze mounting, as if it had been worn on the person. (*See* Archæologia, Vol. xxxix. Pl. xxiv. *fig.* 1.) It has been conjectured, that such ornaments formed part of the *Phaleræ*, or military trappings of Roman soldiers; and as they were ordinarily composed of a more precious material, viz., pale blue chalcedony, it is very probable that the glass medallions may have been made of blue glass for the purpose of imitating that mineral.

123. Medallion, of opaque delicate pale blue glass; a perfect specimen, representing in bold relief, the front face of a Cupid, having the hair gathered into a small scroll curl in the centre, and thence flowing from each side in graceful waves curled at their ends. *Diameter* $2\frac{1}{4}$ *in.*

This, like the preceding, is probably one of a set of Roman *Phaleræ* (a child's head having been a usual ornament in such trappings); it is also an example of pressed work having only an outer surface of the opaque glass.

124. Fragment of a medallion, composed of a thin layer of delicate opaque blue glass backed with a thick stratum of transparent brown glass; it represents the lower part of a bearded face. *Size* $1\frac{1}{4}$ *in. by* $\frac{7}{8}$ *in.*

125. Fragment of a moulded glass tablet, representing the lower part of a female draped figure. It is composed of an opaque grey film, backed with layers of brown and clear glass. *Size about* 1 *in. square.*

126. Winged Griffin, in opaque pale blue glass, moulded hollow and then filled with transparent blue glass. This specimen is evidently a fractured portion of a glass frieze made for ornamental purposes. *Size* $1\frac{3}{4}$ *in. square.*

127. Portion of an oblong Plaque, from a frieze, of semi-transparent dark blue glass; representing, in bold relief, a Cupid holding up some object. *Size* 2 *in. by* $1\frac{5}{8}$ *in.*

128. Portion of an oblong Plaque, from a frieze, representing a winged Cupid terminating in scrolls, executed in semi-transparent dark blue glass. A very fine example of glass frieze work, in bold relief, composed of the same material throughout but having at its back the remains of an opaque white glass to throw up its colour. *Size* $1\frac{7}{8}$ *in. by* $1\frac{3}{8}$ *in.* *Coloured Plate* III., *Fig.* 6.

129. Frieze Decoration, composed of a pale greenish transparent glass, apparently coated on its front surface with a thin, silvery grey, opaque film; and representing, in bold relief, the *bucranium* or skull of an ox, *Fig.* 31, with festoons etc. hanging from its horns. *Size* $2\frac{1}{8}$ *in. by* $1\frac{3}{4}$ *in.* *Fig.* 31.

Fig. 31.

130. Large Mask, in very thick solid crystal glass. This specimen is a fine example of Roman glass frieze work, and represents, in alto relievo, a youthful front face having two scrolls encircling the forehead which meet in the centre

and reach to the ears, above which is a head attire in bold loopings bordering the scrolls. A silvery patina covers the greater part of the surface. *Size* $3\frac{1}{2}$ *in. by* $3\frac{1}{4}$ *in., and greatest thickness* 1 *in.* (Roussel Coll.)

131. Medallion, in solid transparent blue glass. In this curious specimen a bee is represented on both sides, in relief, surrounded with a laurel wreath, but more perfectly developed on one side than on the other. *Diameter* $3\frac{1}{4}$ *in.*

Fig. 32.

132. A Bacchante, in opaque light blue glass backed with a thick layer of transparent blue glass, and executed in bold relief; the figure holds in her left hand a thyrsus, and in her right hand a vase. *Size* $2\frac{5}{8}$ *in. by* $2\frac{1}{2}$ *in.* (Fould Coll.) *Fig.* 32.

133. Fragment of a Plaque of four strata; the lowest one transparent purple, and having opaque white, yellow, and blue enamel layers superposed, which are cut out (in the same manner as the designs on the celebrated Portland Vase) into a bird, a group of fruit, etc. A portion of a white border remains at the lower part. *Size* $2\frac{1}{2}$ *in. by* 2 *in.* (Thibaut Coll.)

This and the following specimens are examples of lathe cut cameo glass, executed in the way that cameos in stone are produced.

134. Fragment of a vase, a cameo specimen of two strata, containing a finely executed small bird and branch of leaves and fruit. The ground of this interesting fragment is of a brilliant blue colour; and the remains of the design upon it show some similarity to that which decorates the celebrated Naples Vase, mentioned in the preliminary essay, and is doubtless of the same age and style of workmanship. *Size about* $1\frac{1}{2}$ *in., by* $1\frac{1}{4}$ *in.*

135. Fragment of a slab ornamented with cameo work, representing a white acorn on dark crimson ground. *Size* $\frac{7}{8}$ *of an inch.*

136. Fragment of cameo glass, with the hind part of a stag, or other large animal, in white on a dark blue ground. *Size* $1\frac{3}{4}$ *in.*

137. Fragment of a cameo glass vase, with white leaves on a greenish light blue ground. *Size about* $1\frac{1}{2}$ *in. by* $1\frac{1}{4}$ *in.*

138. Fragment of a cameo glass vase, with a spray of white coral on an opaque pale green ground. *Size about* 1 *in. square.*

139. Fragment of cameo glass, with a hand holding a cup, in white on a purple ground. *Size* $\frac{5}{8}$ *in. square.*

140. Fragment of a cameo glass tablet, with portions of a white vase and scroll on a blue ground. *Length* 1 *in.*

141. Fragment of cameo glass, with a transparent emerald green leaf, on colourless ground, evidently cut by the lathe. *Length* $1\frac{3}{4}$ *in.*

142. Fragment of cameo glass, with transparent azure blue ornaments on a colourless ground. *Length* $1\frac{3}{4}$ *in.*

143. Large Fragment, in two pieces, of a cameo tablet in opaque white on purple glass. This important specimen is a portion of a very large design, which probably represented a temple. Portions of the steps are visible, and also an imperfect Greek inscription, as shown in the following *fac-simile:*

Size 4 *in. by* 3 *in.* (Thibaut Coll.)

144. Cameo Head, in brilliant opaque white glass on a dark ground, and of the most refined character and workmanship. The subject is the profile head of Ariadne, in bold relief, with the hair gracefully arranged, and encircled with a bandeau. *Size of the head* $\frac{5}{8}$ *in. square.* (Uzielli Coll.)

145. Cameo Head, of Bacchus, in sunk relief, with the head in white, crowned with ivy and relieved by a dark ground, in imitation of *nicolo*. *Size* $1\frac{1}{8}$ *in.*

146. Oval Cameo Head, of a female, in bold relief, showing the full face (possibly a portrait) executed in amber glass. *Diameter* $\frac{1}{2}$ *in.*

147. Oval Cameo Head, representing a female profile, executed in amber glass. *Diameter* $\frac{1}{2}$ *in.*

148. Fragment of a large Cameo Head, in rich purple glass. The head has been a profile, but the eye, forehead, and wavy hair, encircled with a laurel wreath and drawn up into an elegant knot with long pendant curls, are all that remain of this fine specimen of cameo work. It is executed in bold relief, and is probably an example of solid pressed work sharpened and finished up with the lathe. *Size about* 2 *in. square.*

This may be part of the bust of an Imperial lady, and not later than the time of the Antonines.

149. Cameo, in dark amber glass, in imitation of sard and mounted in gold. This beautiful specimen, which is slightly imperfect, represents Hermaphroditus reclining on a lion's skin, attended on one side by a cupid holding a fan shaped

like an ivy leaf, and on the other side by a cupid playing the lyre. *Size* $\frac{7}{8}$ *in. by* $\frac{7}{8}$ *in.* (Uzielli Coll.)

150. Oval Cameo, representing a youthful satyr and a female planting a very large torch, probably a nuptial one, behind whom, on a stele, is the god of Lampsacus. A very fine specimen executed in amber glass, now coated with a silvery patina. *Height* $1\frac{1}{4}$ *in.*

151. Cameo, consisting of three figures, representing the Graces, embedded in rough opaque glass. This specimen bears the appearance of having been burnt. *Size* 1 *in. by* $1\frac{3}{8}$ *in.* (Hertz Coll.)

152. Large Oval Cameo, in opaque red glass, variegated with splashes of white and black, in imitation of jasper. The subject is a Centaur, in bold relief, clothed in a lion's skin, carrying on his right shoulder a wine vase, and on his left a thyrsus. Below is the inscription, Lavr. Med., signifying that this specimen belonged to the collection of Lorenzo dei Medici, if not cast from a gem so inscribed. *Size* $2\frac{1}{4}$ *in. by* $1\frac{1}{4}$ *in.* (Roussel Coll.) *Coloured Plate* III. *Fig.* 7.

Fig. 33.

153. Glass Boat, of very thick dark green glass. This curious specimen was evidently cut out of the solid by the lathe; the sides are carved, in imitation of a galley, and rest on four triangular feet. Found at Pompeii, and stated to have contained jewels. *Length* $8\frac{7}{8}$ *in.* *Fig.* 33.

Vessels of this form were called *Cymbia* by the Romans.

Fig. 34.

Fig. 35.

Fig. 36.

154. Oval Intaglio, in very dark amber glass, in imitation of a sard. This specimen is of beautiful workmanship, and represents a graceful female figure,

slightly draped and in a dancing attitude. It is mounted in a ring. Presented by A. W. Franks, Esq. *Fig.* 34 (*full size*).

155. Oblong Intaglio, in bright green glass; a very fine specimen, representing Aphrodite, with two sea horses, on the foremost of which she is seated front-wise; a veil behind her forms a sail. (Uzielli Coll.) *Fig.* 35 (*full size*).

156. Oval Intaglio, in delicate green glass; an exquisite specimen, representing Victory sacrificing a bullock. She is kneeling in a graceful attitude, with slightly raised wings, while behind her the head of the animal is indicated, and in her left hand is a sacrificial knife. *Fig.* 36 (*full size*).

This subject is often repeated in gems and in marble.

157. Oval Intaglio, in brilliant blue glass, somewhat fractured. It represents a drooping warrior, probably Achilles, who has been wounded in the heel by Paris, and seems to be looking at the wound. Behind him is a large shield, supported against the right shoulder, and bearing a representation of warriors on horseback and foot. The left leg is wanting, but there is enough of the figure remaining to show that, for refined and masterly execution, this splendid specimen is not to be surpassed. *Height* $1\frac{1}{8}$ *in.* (Uzielli Coll.)

This Intaglio is made probably from a gem of the time of Pericles, but of which no other traces are now to be met with.

158. Oval Intaglio, in brilliant purplish blue glass, representing a child playing with a dog, which is standing on its hind legs. This specimen is either of rude workmanship or decayed through age. *Height* $\frac{7}{8}$ *in.*

159. Oval Intaglio, in brilliant blue glass (a fine Greek work), representing a standing winged Victory writing on a shield. *Height* $1\frac{1}{4}$ *in.* (Uzielli Coll.)

The attitude and motive of this figure are very similar to those of the famous bronze figure of Victory found at Brescia.

160. Small oval Intaglio, in dark glass, representing a male divinity, holding a shield, and about to pierce with a spear an anguipede giant at his feet. *Height* $\frac{1}{2}$ *in.*

161. Intaglio, in amethyst glass, representing a mask of Silenus crowned with ivy. *Height* $\frac{5}{8}$ *in.*

162. Oval Intaglio, in delicate pale green glass, representing the full-faced bust of a beautiful woman, very deeply and exquisitely executed. The head is encircled with a diadem, and the waving curls of the hair rest on the shoulders round which is an embroidered collar. *Height* $\frac{3}{4}$ *in.* (Uzielli Coll.)

163. Small Oval Intaglio, in opaque blue glass, in an ancient gold setting which is cut at the back into the form of a cross. The intaglio represents the upper half of a female figure with a cornucopia, probably Abundantia. There is a small gold stud inserted in the glass to give it the appearance of being lapis lazuli. *Height* $\frac{3}{4}$ *in.*

164. Oval Intaglio, of white glass, representing a warrior holding a bow in his left hand, and a buckler on his right arm. This is covered with a beautiful silvery iridescence. *Height* $\frac{3}{4}$ *in.* Found in Sardinia.

165. Roman gold Finger Ring. This very remarkable ring has a circular signet $\frac{11}{16}$ of an inch in diameter, and two moulded gold borders, between which is a zone of dark glass paste engraved with minute figures of birds and animals; in the centre is an intaglio head of Bacchus, surrounded by a gold field, which is cut to the exact form of the outline of the head. (Uzielli Coll.)

166. Oval Intaglio, in deep blue glass, backed with opaque yellow glass, so as to leave a diagonal bar of the blue running across the centre, and impart an emerald hue to the remainder; the device is a rudely-formed lion, the head and mane of which, however, are rather carefully executed. This curious specimen is mounted in a plain silver ring. *Size* $\frac{3}{4}$ *in. by* $\frac{1}{2}$ *in.*

167. Fragment of a Bowl, of opaque black glass, having the field cut out, and leaving the ornament, a Greek wave border, in relief. *Length* $1\frac{3}{4}$ *in.*

168. Fragment of a Patera, of brilliant deep blue glass, with designs cut out of the surface in intaglio, consisting of leaves and fruit, with a border. The traces of the cutting tool are perceptible on the reverse. *Size* $2\frac{1}{4}$ *in. by* $1\frac{1}{2}$ *in.*

169. Two fragments; one of a thick circular light green Dish, having the surface engraved with a spotted animal, a hand holding a vase, etc.; the other a fragment of light greenish glass, with the head and neck of a wolf-like animal, and long leaflets rudely engraved or lathe-cut upon its surface. *Length of each about* 4 *in.*

These specimens are either of the time of Constantine, or of his immediate successors.

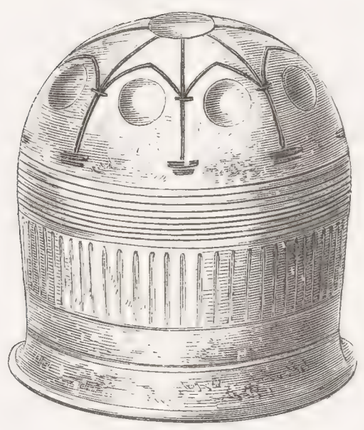


Fig. 37.

Fig. 38.

170. Cup of the purest kind of colourless glass, covered with a very delicate silvery and opalescent iridescence. This elegant vessel is effectively ornamented with a series of lathe-cut curving festoon lines, each partially surrounding a smooth-cut circular facet, and also with an encircling band of delicate flutings, etc. Found at Cologne. *Height* $2\frac{3}{4}$ *in. by* $2\frac{7}{8}$ *in.* *Fig.* 37.

171. Roman Tumbler, or cup, of a very fine description of the *crystallinum*

or colourless glass, probably such as was used for the manufacture of the costly table vessels so highly prized by the ancient Romans. In form and workmanship it is elegant and faultless. The body of the vessel has a very graceful sweep, and slightly projects beyond both the margin and the base; it has also lathe-cut rows of beautifully regular oblong hexagonal facets surrounding it, forming a kind of honeycomb pattern. This remarkable vessel (which is perfect excepting at one part of the foot) was found in an ancient Roman cemetery at Barnwell, near Cambridge. *Height* $3\frac{1}{2}$ *in. by* $3\frac{3}{4}$ *in. Fig.* 38.

Two portions of similar vessels, found in London, were in Mr. Roach Smith's Collection, and are now in the British Museum. One of them is engraved in Plate 3, fig. 3 of Pellatt's "Curiosities of Glass Making," who speaks of it as being a very rare specimen, displaying the great perfection of ancient glass cutting.

C. ROMAN GLASS BLOWN IN A MOULD.

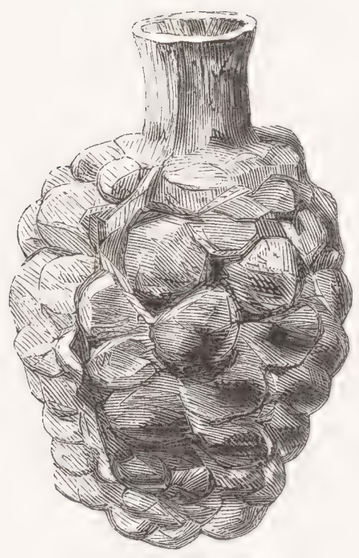


Fig. 39.

Fig. 40.

Fig. 41.

172. Ampulla, of white glass, pressed into the form of a fir cone, the neck forming the stalk; covered with a pearly and golden iridescence. *Height* $2\frac{1}{2}$ *in.* Found in Syria. (Roussel Coll.) *Fig.* 39.

173. Ampulla, of violet glass, having two faces pressed on it in a rude style; of Romano-Egyptian workmanship. *Height* $2\frac{3}{4}$ *in.* (Roussel Coll.) *Fig.* 40.

174. Ampulla, of pressed blue glass, iridescent and imitating the form of a bunch of grapes with leaves on the upper part. *Height* 3 *in. Fig.* 41.

175. Ampulla, of opal-coloured glass tinged with a delicate pink; pressed in a mould somewhat like the preceding. *Length* $2\frac{5}{8}$ *in.*

176. Ampulla, of dark brownish purple glass, iridescent; moulded into the form of a dried date. *Length* 3 *in.* (Roussel Coll.)

177. Small Ampulla, in the form of a dried date, composed of shaded amber-coloured glass imparting to it a highly natural appearance; and covered with a beautiful sparkling iridescence. *Length* 2 *in.* (Uzielli Coll.)

178. Amphora, of violet-coloured glass, with decayed and beautifully iridescent surface, encircled with a series of horizontal alternate narrow flutings and ribbings. *Height* 3 *in.* (Roussel Coll.) *Coloured Plate* V. *Fig.* 1.

179. Ampulla, of opaque light blue glass, much decayed; it is moulded in relief and ornamented with an amphora, præfericulum, diota, and other vases placed between six columns supporting pointed arches similar to such as were afterwards termed Gothic; immediately beneath each arch is a conical projection like the cap of the Dioscuri, and near the base are festoons and bunches of grapes. *Height* $3\frac{1}{4}$ *in.* Brought from the Greek Archipelago by M. Péretié. (Roussel Coll.) *Coloured Plate* V. *Fig.* 2.

A Vase of the same description but in opaque white glass and with fruits in relief was also brought from the East by M. Péretié, then Chancellor to the French Consulate at Beyrout. It has been published by M. de Longpérier, in the Bulletin Archéologique de l'Athénée Français, January 1857, who compares the decoration to that of the monuments of the Asmonean princes of Judæa, and suggests the possibility of the glass vessels being Jewish.

180. Ampulla, of dark blue glass, ornamented as the preceding vessel, and probably stamped in the same mould. Found in Syria. (Rollin Coll.)

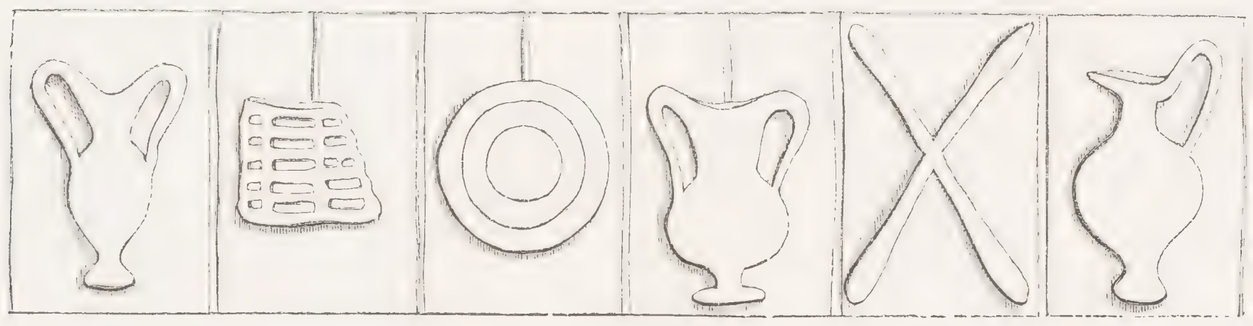


Fig. 42.

181. Ampulla, of light green glass corroded; the body surface is divided by projecting lines into six compartments, containing in relief (see *Fig.* 42) an amphora, syrinx, patera or tympanum, amphora or diota, crossed sceptres, and præfericulum, above and beneath which the vessel is fluted. *Height* 4 *in.* From the Archipelago. (Roussel Coll.) *Coloured Plate* V. *Fig.* 3.

182. Ampulla, of brown amber-coloured glass, corroded by age; pressed into a rude double face with ringlets, of Romano-Egyptian workmanship. A peculiarity of this vessel is that of having inside the neck, at its junction with

ROMAN MOULDED GLASS.

the body, a flat ledge of glass punctured with a small hole so as to allow the liquid perfume to escape drop by drop. *Length* $3\frac{3}{4}$ *in.* (Rollin Coll.) *Coloured Plate* V. *Fig.* 4.

183. Ampulla, of rich dark purple glass, of Romano-Egyptian workmanship; the form is of a similar character to that of the preceding, but it has a much longer neck without a rim. *Height* $4\frac{1}{4}$ *in.* (Roussel Coll.)

184. Ampulla, of white glass with silvery patina; the base is flat and the body oviform tapering into a neck with a broken rim. This vessel is moulded in imitation of wicker-work with garlands of laurel leaves encircling the middle and shoulder. *Height* $3\frac{3}{4}$ *in.* (Roussel Coll.)

Fig. 43.

Fig. 44.

185. Amphora, of amber-coloured glass; ornamented with pressed scroll-work round the centre, above and beneath which are vertical flutings. *Height* 3 *in.* *Fig.* 43.

186. Amphora, of dark amber-coloured glass of the same pattern as the preceding. *Height* 3 *in.*

187. Amphora, of violet glass, iridescent; of flattened form ornamented with a pressed rosette and scroll border. *Height* $3\frac{1}{4}$ *in.* From the Archipelago. (Roussel Coll.) *Fig.* 44.

188. Armilla, of blue glass encircled with two rows of raised pressed ornament of a twisted cord pattern. *Diameter* $3\frac{1}{4}$ *in.* Found at Cologne, and presented by the late G. S. Nicholson, Esq.

189. Fragment of a Cup, of yellow glass, ornamentally embossed; inscribed in relief, . . . *PAINOY*. (Thibaut Coll.)

190. Fragment of the bottom of a Vase, of thick light green glass; inscribed . . . *BЄPIN* . . . in relief, probably part of the maker's name. (Thibaut Coll.)

191. Bottom of Bottle, of light green glass, displaying a horse in relief surrounded by a circle, and having ornamented corners. *Size* $3\frac{1}{2}$ *in. square*, when perfect.

192. Base of a square Bottle, of very thick greenish glass, inscribed in three lines, respectively . . . M., . . . A R., . . . A E. *Size* $2\frac{1}{2}$ *in. by* $1\frac{1}{4}$ *in.*

This is part of the stamp of a glass maker, which has given rise to some discussion among archæologists. Several examples have been found. One found at Clermarais, near Reims, was communicated to the "Revue Archéologique" (New Series, Vol. v. p. 247) by M. Loriquet and mis-read. This was amended by Count Conestabile in the same periodical (l. c., p. 378), who quotes several examples; for instance, one published by Passeri (Synt. Mon. Etr., Tab. x., p. 39), another by Fabretti (p. 531), a third in the Museum at Perugia found at Todi, and two others in the Campana Collection. The real reading of the inscription escaped, however, Count Conestabile, but was brought to light by M. Detlessen, also in the "Revue Archéologique" (N. S., Vol. viii., p. 215), who notices another instance found in a Roman Tomb at Weyden, near Cologne, which decided the reading, viz.: FIRMI HILARI HYLAE, being the mark of the glass maker—Firmus Hilarus Hylas.

193. Portion of the bottom of a Bottle, bearing a circular inscription (indistinct), ...NVAETAVOLV.... *Diameter* $1\frac{1}{4}$ *in.*

194. Portion of the bottom of a glass Bottle, with a part of the same stamp as the last, but showing only the letters . . . VOLV . . . on the segment of a circle. *Length* $1\frac{1}{4}$ *in.*

195. The base of a Cup, of very thick colourless glass, containing the impress of the obverse of a first brass coin of Domitian, with the head of the Emperor and portion of the legend—IMP. CAES. DOMIT. ..... COS. *Size* $2\frac{1}{4}$ *in by* $1\frac{1}{4}$ *in.*

In the British Museum is preserved a portion of a similar vase, found in London, but with an impression from a coin of Hadrian.

196. Part of the bottom of a square Bottle, of a light greenish glass, with a horse in relief, but imperfect. *Size* 2 *in. by* $1\frac{1}{2}$ *in.*

Fig. 45.

Fig. 46.

Fig. 47.

197. Unguentarium, of light green glass, with elongated four-sided body, slightly tapering towards the base, and having a long round neck with broad rim;

on the bottom is the stamp of the maker, viz., a figure standing, and the initials G F H I. indicated. Found at Castra Vetera, Xanten, near Cologne. *Height* 6 *in.* (Houben Coll.) *Fig.* 45.

The same stamp occurs on a bottle discovered in a tomb at Gelsdorf, near Bonn, in 1863, and it may be observed on specimens in the British Museum, and on others in the Museums of Perugia, Ferrara, Parma, and the Campana Collection now at Paris (see "Revue Archéologique," N. S., Vol. viii., p. 223.)

198. Fragment of a Cup, of light green glass, pressed in relief with a charioteer in a quadriga, holding a whip, etc., and passing the goal or *meta*. (Roussel Coll.) *Fig.* 46 (*full size*).

A similar fragment is engraved in C. R. Smith's "Roman London," and an entire cup of this kind has recently been found at Colchester. Over the four charioteers are their names; the conqueror is addressed Ave, the three others Vale. Gladiatorial combats also occur, such as those found in Savoy, published in the "Revue Archéologique," N. S., Vol xii., p. 305.

199. Fragment of the Handle of a Poculum of sapphire blue glass, with an inscription pressed or pinched on each side in Greek and Latin. On one side *APTAC · CЄIΔω*, on the other ARTAS · SIDON. (Thibaut Coll.) *Fig.* 47 (*full size*).

This fragment is of great interest, as it shows that the vessel was made by a glass-maker, named Artas, at Sidon (whilst under the Roman dominion) a city historically famed for the manufacture of glass, the invention of which has been attributed to the Sidonians. In the British Museum is preserved the entire handle of a vase with this stamp. It occurs both on amber glass and deep blue glass. In the Munich Collection is a handle inscribed *ΣЄIΔω NEIKωN*. A specimen found at Syracuse and published in the "Bulletino Archeologico" 1846, p. 220, is inscribed *EIPHNAIOΣ ΣIΔωNIOΣ*. This is peculiarly interesting in connection with a handle of amber glass in the British Museum, which bears on one side the inscription *EIPHNAIOΣ EΠOIHΣEN*, on the other the bust of Caligula, which serves to fix the date of all these specimens.

Fig. 48.

200. Poculum, of sapphire glass; cylindrical in form, with the lower edge rounded off and resting on a ring, and having opaque white handles of zig-zag

shape attached to the outside of the cup. This specimen is blown glass, but it is described here because the form of the handles and its beautiful colour render it probable that it was produced in the glass manufactory at Sidon, mentioned in the preceding paragraph. Found in the Roman Station at Castra Vetera, Xanten, near Cologne. *Diameter* 4 *in.* *Height* $2\frac{3}{8}$ *in.* (Houben Coll.) *Fig.* 48.

201. Vase (the bottom of which is wanting) having the form of a head, the face of which has a youthful African cast of expression; surrounding the head is a mass of stiff curls of even lengths in long rows encircled with a fillet of ivy leaves. This very striking specimen is formed of pale greenish glass now much corroded. *Height* $3\frac{1}{4}$ *in.* (Raoul-Rochette Coll.) *Coloured Plate* VI. *Fig.* 1.

202. Small Urn, of light greenish blue glass, with wide mouth, plain inwardly sloping margin, and globular body surrounded by six zones of pressed ornaments; 1st, an upright ivy leaf moulding; 2nd, anchors, with dolphins and other fish; 3rd, a running stalk of ivy leaves; 4th, a gadroon border; 5th, a species of ovolo moulding; 6th, an acanthus pattern. Under the foot is a series of concentric circles. The marks of the mould are very visible, showing that it was made in two pieces. *Height* $3\frac{3}{8}$ *in.* *Diameter* $3\frac{1}{4}$ *in.* (Roussel Coll.) *Coloured Plate* VI. *Fig.* 2.

203. Large Bowl, of very thick green glass, ornamented with a series of uniform equi-distant projecting ribs of a bold character tapering downwards from below a smooth margin. This fine vessel was probably pillar moulded and afterwards turned in the lathe, the marks of the instrument being visible round the external margin and on the interior. *Height* 3 *in.* *Diameter* 8 *in.*

Pillar moulding differs from ordinary moulding, and the process adopted by the ancients may have accorded with the modern method. Speaking of the latter, Pellatt says, in substance, that the metal is first gathered upon a rod in the ordinary manner, excepting that the first gathering is allowed to cool to a greater degree of hardness than usual; the second coating is then pressed into a mould as hot as possible, that the exterior coating alone may be acted upon by the pressure of moulding and the interior preserve its smooth circular area. See "Curiosities of Glass-making," page 104.

204. Six Fragment Specimens, of different vessels formed of variegated glass, and ornamented with ribs; probably moulded as above described, as also may have been the four following specimens.

205. Small Cinerary Urn, of bright amber glass; similar in form to *Fig.* 2, *Coloured Plate* VI., but shallower and more globular, and with delicate moulded vertical ribs. This vessel is in perfect preservation through its having been deposited in the ground enclosed within two Samian cups, and probably once contained the ashes of a child. *Height* $2\frac{3}{8}$ *in.* *Diameter* $3\frac{1}{4}$ *in.*

206. Bowl, of dark veined purple glass, mixed with amber, in imitation of onyx; a fine specimen of material and form, the latter being of a very graceful shallow hemispherical character, with slightly raised vertical ribs extending to a delicately recurving margin. *Height* $2\frac{1}{4}$ *in.* *Diameter* 6 *in.* (Rollin Coll.)

ROMAN MOULDED GLASS.

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207. Bowl, of brilliant blue glass; hemispherical with delicate moulded vertical ribs, marginal fluting, and lathe marks on the inside. Found at Cologne. *Height* $2\frac{1}{4}$ *in.* *Diameter* $4\frac{5}{8}$ *in.*

208. Cinerary Urn, of green glass, iridescent, with low concaving margin, and expanding compressed spherical body, ornamented with delicate moulded vertical ribs extending from the shoulder half-way down, and having a slightly recurving base. *Height* $5\frac{1}{4}$ *in.* *Diameter* 6 *in.*

209. Œnochoe, of brilliant deep blue glass, with trefoil mouth, etc. Around the centre is a device pressed incave, consisting of a series of intersecting circles, each indented in the centre, whilst above and below them are double rows of similar small circular indentations. This splendid and important specimen is covered with an iridescence of the most superb purple hue, diversified with green and gold, the beauty of which varies with every point of view. *Height* 5 *in.* *Coloured Plate* VII. *Fig.* 2.

210. Bottle, of a kind of crystal glass, very fine in quality and having a somewhat opalescent appearance. The form is of a rare and elegant character, faultlessly manipulated and having bold moulded side projections, the spaces between which are deeply depressed for the purpose of affording a firm hold to the vessel. Around the shoulder are a series of sharp lathe-cut circles. This unique specimen was found at Cologne. *Height* 6 *in.* *Diameter* 4 *in.* *Fig.* 49.

Fig. 49.

D. ROMAN BLOWN GLASS.

Fig. 50.

211. Cantharus, or wine cup of thick amber glass of a golden hue and of the highest quality. The form of this beautiful cup is very fine and the body is elegantly ornamented with simple bold projecting pellets of opaque white enamel. A silvery patina imparts additional beauty to this specimen. Found at Cologne. *Height* $4\frac{1}{4}$ *in.*, *Fig.* 50.

212. Small Bowl, of colourless glass, bell-shaped and resting on a ring; on the lip are two ribbed bands of glass. *Height* 2 *in.*, *Diameter* $4\frac{1}{4}$ *in.*

213. Saltcellar, of thick lapis lazuli coloured glass, the outside of which has been fashioned by turning on the lathe; it is a depressed shallow cup, having a swelling body encircled with a fluting and receding thence to a flat base. *Height* $1\frac{1}{4}$ *in.*, *Diameter* $2\frac{1}{4}$ *in.*, *at the mouth.* Found at Cologne.

214. Cup, of colourless glass, in form very similar to Fig. 51 and having five semicircular projections towards the base pinched out of the mass. Found at Cologne. *Height* 2 *in.*, *Diameter* $2\frac{3}{4}$ *in.*

215. Cup, of colourless glass of an opalescent character, extremely light in fabric, and covered with a mother-of-pearl-like iridescence. This beautiful vessel rises oviform from a flattened base and is elegantly ornamented with horizontal bands produced by the lathe. Found near Cologne. *Height* $3\frac{1}{8}$ *in.*

216. Cup, of blue glass, rising funnel-shaped (with slightly concaving sides), from a flat base, and marked externally with horizontal ribbed bands produced

by the lathe. The bottom of this cup is thick and remarkable for having a considerable projection inside. *Height* $3\frac{3}{4}$ *in.* (Roussel Coll.).

217. Small Cup, of blue glass; cylindrical, but slightly tapering downwards to a flat base, and covered with iridescence. *Height* $1\frac{1}{2}$ *in.*

218. Cup, with a short stem and a foot, of lapis lazuli opaque glass. The body is of a shallow hemispherical form, slightly concaving below the margin, and the surface is covered with a silvery iridescence on the interior, a similar film having evidently been scraped off the exterior to show the colour of the glass. Found at Cologne. *Height* $1\frac{3}{4}$ *in.*, *Diameter* $2\frac{7}{8}$ *in.*

219. Cup, or Basin of white crystalline glass, very brilliant; it is thick and cylindrical with rounded base supported on a smaller double ring. The substance of the glass contains numerous cracks or stars produced by not having been properly annealed (or plunged into water) while hot, but as these cracks do not penetrate to the surface of the vessel it will still hold liquids. It is a remarkable imitation of crystal, and notwithstanding its thickness is very light. Found at Castra Vetera, Xanten. *Height* $2\frac{3}{4}$ *in.*, *Diameter* $3\frac{3}{4}$ *in.* (Houben Coll.).

220. Basin, of thick brownish glass like horn, hemispherical in form and polished apparently on the lathe both within and without. It has two lathe cut bands encircling the interior margin, and two external ones encircling the base. *Height* $2\frac{1}{2}$ *in.*, *Diameter* $5\frac{3}{4}$ *in.* (Roussel Coll.).

221. Cup, of light green glass. It has a looped handle at the side and an outward curving lip whence it expands downwards and then sharply contracts to a narrow base rim; the surface is covered with an amber-like iridescence. *Height* 3 *in.* *Diameter* 3 *in.*

222. Cup, of thin white glass, oviform and ornamented externally with four sets of six spots in relief arranged in triangles; the sets are alternately green and blue, and between them is a large blue boss. Around the margin are two slightly indented bands, turned on the lathe. *Height* $3\frac{1}{8}$ *in.* *Diameter* $3\frac{3}{8}$ *in.* (Roussel Coll.).

223. Cup, of very thin colourless glass delicately iridescent, rising oviform, and expanding slightly at the rim, below which is a band cut by the lathe; it is ornamented with three nearly central green bosses. Found near Cologne. *Height* $3\frac{1}{2}$ *in.* *Diameter* $2\frac{3}{8}$ *in.*

224. Bowl, or cup of pale greenish toned glass, very thin and light in fabric and covered with an exquisite patina of beautifully varying hue according to the different aspects in which it is seen. It is quaint in form, somewhat resembling the cup of a flower, the vessel being conical when inverted and having its narrow or lower end deeply indented (like Fig. 49) with seven cavities to afford a hold for the fingers. Found at Cologne. *Height* 2 *in.*, *Diameter* $4\frac{1}{2}$ *in.*

225. Cup, of fine colourless glass. This elegant vessel rests on two rings encircled with a fillet, and has a bulbous body of a pear-shape character with a slightly outward curving margin. The body is indented like the preceding with twelve cavities. *Height* $3\frac{1}{4}$ *in.*, *Diameter at the mouth* 2 *in.*

226. Cup of colourless glass; ornamented with opaque white and pale blue lines in relief, of irregular zig-zag patterns placed alternately, and formed by trailing molten glass over the cup. Found at Cologne. *Height* $2\frac{7}{8}$ *in.* *Fig.* 51.

Fig. 51.

Fig. 52.

227. Calix, of dark blue glass, with a loop handle and an opaque white band encircling the rim. *Height* $3\frac{1}{8}$ *in.* *Diameter* $4\frac{1}{8}$ *in.* (Roussel Coll.). *Fig.* 57.

228. Small Vase, of green glass, iridescent. This vessel is cylindrical in form, but slightly concaves, and terminates upwards with a rounded rim supporting a socketed cover with a vertical handle. *Height* 2 *in.*

Fig. 53.

Fig. 54.

Fig. 55.

229. Small Urn, of yellowish glass, of very thin fabric, and corroded; the body curves slightly outwards at the lip and expands downwards to the base, which, though rounded, has a considerable "kick-up," to enable the vessel to stand upright. *Height* 2 *in.* *Diameter* $2\frac{1}{2}$ *in.*

230. Small Cinerary Urn, of green glass: surrounding the upper part is a projecting fillet of clear glass placed in a zig-zag form and attached to the lip. Found in the Archipelago. *Height* 3 *in.* (Roussel Coll.). *Fig.* 52.

231. Small Cinerary Urn, corresponding with the preceding. (Roussel Coll.).

232. Large Cinerary Urn (*Urna Ossuaria*), of green glass, richly iridescent. This vessel is somewhat similar in form to *Fig.* 52, but without the engobe, and with a smaller mouth in proportion; it has two fine massive looped handles, with the two ends of each fastened to the shoulder part of the body. The glass cover is coated with plaster, by which it was once hermetically sealed. Found in the Necropolis of Tharros, in Sardinia. *Height* 10 *in.*

233. Cinerary Urn, of very thick green glass, similar in its body form to *Fig.* 52, but having a short cylindrical neck, with outwardly-curving mouth. From the shoulder two broad ribbed handles rise vertically, and then turn inwards to the centre of the neck, to which they are attached. *Height* $6\frac{1}{2}$ *in.*

234. Large Cinerary Urn, of light green glass, covered with a delicate pearly and roseate iridescence. The body is oviform, recurving into a small base rim at the lower end, and into a short neck and expanding mouth at the upper end, and two *double-looped* handles are attached to the shoulder; the top is surmounted by a knobbed cover. Found in the South of France, enclosed in a leaden cist, which is preserved in this collection. *Height* $12\frac{1}{2}$ *in.*

235. Jug, of green glass, tapering more sharply from the centre, both above and below, than *Fig.* 52, but into a recurving lip at the top, and into a small base rim at the bottom. To the mouth a handle of unusual form is attached, composed of a flat piece of glass, projecting slightly above it, and descending thence, at a sharp outward angle, till it forms an acute angle with a small projection proceeding from the centre of the body. *Height* $8\frac{1}{2}$ *in.*

236. Jug, of greyish blue glass, barrel-shaped, with flat base and slightly-recurving mouth, to which a curious small thin and flat white side handle is attached descending obliquely from a projecting elbow until it touches the body. *Height* $4\frac{3}{8}$ *in.*

237. Diminutive Jug, of purplish violet glass corroded; this has a peculiar angular handle. *Height* $1\frac{3}{4}$ *in.* *Fig.* 53.

238. Vase, of very dark purple glass, oviform and standing on three feet. The body is studded with irregular pellets of white, yellow, and blue enamel, splashed on at random. *Height* $2\frac{5}{8}$ *in.* *Fig.* 54.

This specimen is alluded to in the Preliminary Essay.

239. Small Jug, of purplish violet glass, effectively corroded: the base is rounded, and the quaint angular handle is of emerald green glass. *Height* $2\frac{1}{2}$ *in.* (Roussel Coll.). *Fig.* 55.

240. Præfericulum, of greenish amber glass. This fine specimen of form and material has a blue spiral thread encircling its neck and trefoil mouth. The handle is depressed down the centre and ridged at the sides, and the body is

corroded so as to impart great richness of colour to its surface. *Height* $10\frac{1}{2}$ *in.* *Fig.* 56.

Fig. 56.

241. Small PRÆFERICULUM, of white glass, having a depressed spherical body, a long neck, and an elegant expanding boat-shaped mouth. A broad flat handle rises from the shoulder and joins the mouth, surmounted by two pinched projections; two delicate threads encircle the shoulder. Found at Castra Vetera, Xanten. *Height* $4\frac{1}{2}$ *in.* (Houben Coll.).

242. Amphora, of colourless glass, with a flattened spherical body, coated with a yellowish white concretion. *Height* 6 *in.* *Fig.* 58.

Fig. 57.

Fig. 58.

Fig. 59.

243. Amphora, of very thick green glass, with two massive handles, each having a projecting central rib. *Height* $3\frac{1}{2}$ *in.* (Roussel Coll.). *Fig.* 59.

244. Amphora, of greenish white glass, with a pearly hue. This is similar in form to *Fig.* 59, but ornamented with a delicate thread which encircles the body horizontally in numerous folds. *Height* 3 *in.*

245. Amphora, of light green glass, iridescent, with oviform body tapering into a long neck, supporting two loop handles at the sides. *Height* 8 *in.*

246. Ampulla, of greenish white glass, with flat base and pear-shaped body, tapering into a neck, encircled with a delicate spiral thread, and expanding at the mouth. *Height* $3\frac{3}{4}$ *in.*

247. Ampulla, of very thick light green glass, with thick pear-shaped body, and a long cylindrical neck, having a horizontal narrow rim of a pearly hue from decay; the whole of the vessel is finely iridescent and corroded. From Babylon. *Height* $5\frac{7}{8}$ *in.*

248. Ampulla, of colourless glass, covered with an exquisite mother-of-pearl iridescence. The body is of spherical form, with a concaving neck, expanding at the mouth and elegantly ornamented with four adjoining vertical circles extending from the shoulder to the base, and each composed of a series of lathe-turned delicate flutings. *Height* 5 *in.*

249. Ampulla, of blue glass, very similar in form to *Fig.* 1, *Coloured Plate* VII., but rather more conical. *Height* $2\frac{1}{4}$ *in.*

250. Ampulla, of yellow amber glass, with a beautiful decay, imparting to

it the appearance of a delicate bird's egg: in form similar to the preceding. *Height* $1\frac{7}{8}$ *in.*

251. Ampulla, of rich amber glass, rising conically from a very rounded base, but more taperingly than the preceding. *Height* $2\frac{1}{2}$ *in.*

252. Ampulla, of colourless glass, very delicately corroded, having a broad flattened base, and rising conically into a neck like that in *Fig.* 1, *Coloured Plate* VII. Found at Cologne. *Height* $2\frac{3}{4}$ *in.*

253. Miniature Ampulla, of dark amber glass whitish speckled; with pear-shaped body and thick neck. *Height* $\frac{5}{8}$ *in.*

254. Spherical Ampulla, of delicate green glass, extremely thin and light in fabric, and having an iridescence, imparting to it the appearance of a brilliant bubble; the neck is short. *Height* $2\frac{1}{2}$ *in.*

255. Spherical Ampulla, of deep blue glass, with smaller body and longer neck than the preceding. *Height* $2\frac{1}{4}$ *in.*

256. Ampulla, with a handle, of dark grey glass, having a rounded base, globular body, and flattened shoulder, whence rises a delicate side handle attached to the neck. *Height* $2\frac{1}{4}$ *in.*

Fig. 60.

257. Flattened Amphora, of pale greenish glass. The body is compressed and quaintly ornamented on each side with raised or trailed opaque glass, indented,

and forming a rude but striking pattern partly blue and partly yellow. This singular vase was found at Cologne. *Length* $7\frac{7}{8}$ *in.* *Diameter* 4 *in.* *Fig.* 60.

The workmanship of this specimen is like that of No. 226. Similar examples have been found in Germany. Two specimens, from a tomb near Crefeld, have been presented by George Witt, Esq., to the British Museum. A very elegant præfericulum with similar blue and yellow decoration was found in a Roman sarcophagus at Gelsdorf, near Meckenheim, and is engraved in the Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande, Heft xxxiii. Pl. iii.

258. Ampulla, of pinkish purple glass extremely thin and light in fabric, having a bold oviform body tapering into a slender neck with an expanding rim. *Height* 5 *in.* (Roussel Coll.)

259. Ampulla, of colourless glass beautifully iridescent, having a globular body and long cylindrical neck with flattened rim. *Height* 3 *in.* (Roussel Coll.)

260. Ampulla, similar to the preceding. (Roussel Coll.)

Fig. 61.

Fig. 62.

Fig. 63.

261. Jug, of blue glass, ornamented with wavy bands of opaque white, a bright green handle and foot-rim; also with a thick round band of green glass encircling the rim and running into a spiral thread which entwines the neck. *Height* $3\frac{3}{4}$ *in.* *Fig.* 61.

262. Amphora, of blue glass, having fluted handles, and the lip edged with opaque white enamel. From the Archipelago. *Height* 5 *in.* (Roussel Coll.). *Fig.* 62.

263. Jug, of light blue glass; the spiral thread encircling the neck, the base and mouth rims, and the handle, being all of opaque white glass. Found at Cologne. *Height* $3\frac{1}{2}$ *in.* *Fig.* 63.

264. Tall Jug, of light bluish-green glass, having a conical body, a long cylindrical neck, and a very fine boldly ribbed long handle projecting from the mouth about an inch and inclining inwards to the shoulder, whence the central

Fig. 65. *Fig.* 64. *Fig.* 66.

rib descends two-thirds down the body, in the form of a curving wedge-shaped ridge, elegantly serrated at its base like the back-bone of a fish. A series of delicate threads of clear glass run diagonally across the whole of the body, commencing at the shoulder and regularly increasing in width apart downwards. *Length* $11\frac{1}{2}$ *in.*, *Diameter at the base* $5\frac{1}{4}$ *in.* *Fig.* 64.

This remarkable vessel was found in a cemetery at Barnwell, near Cambridge,

with the cup No. 171. A very similar specimen was found in 1865 by some workmen who were excavating in Windsor Park, and was presented by the Queen to the British Museum, after a drawing had been made of it for Her Majesty.

265. Bottle, of yellow glass corroded; having a pointed base like a lachrymatory. From Vetera Castra, Xanten. *Length* $6\frac{5}{8}$ *in.* (Houben Coll.)

266. Lachrymatory, of blue glass corroded; ornamented with an incuse spiral line round its lower end. *Height* $5\frac{1}{2}$ *in.* *Fig.* 65.

267. Lachrymatory, of purple-violet glass, corroded; similar in form to the preceding but not ornamented. *Length* $4\frac{1}{2}$ *in.*

268. Lachrymatory, of colourless glass, spindle-shaped and covered with a silvery iridescence. *Length* $7\frac{1}{2}$ *in.* *Fig.* 66.

269. Lachrymatory, like the preceding but rather less slender; on the interior is a silvery iridescence seen through the exterior. *Length* 8 *in.*

270. Bottle, of blue glass, with a side handle, a cylindrical neck, an elongated oviform body, depressed into eight vertical deep cavities, and a rounded base. *Height* $4\frac{5}{8}$ *in.*

271. Bottle, of greenish-toned-amber glass, with a long neck, a rounded shoulder and a body tapering thence downwards (somewhat like *Fig.* 62), depressed into eight deep vertical cavities. *Height* $4\frac{5}{8}$ *in.*

272. Small Bottle, of opaque turquoise blue glass, with rounded base, cylindrical body, short neck, and flattened overhanging lip, but having only a small orifice at the mouth for sprinkling essences or perfumes. *Height* $2\frac{1}{8}$ *in.* (Rollin Coll.)

273. Bottle, of colourless glass, semi-opaque from decay; with an almost cylindrical body, having a flattened shoulder supporting two loop side handles which rest against the base of a rimless and narrow slightly tapering cylindrical neck; the body is encircled with bands of lathe-cut fine lines. Found near Cologne. *Height* $4\frac{1}{2}$ *in.*

274. Bottle, of colourless glass similar in appearance to the preceding. This is a singular cylindrical specimen, slightly rounded at both ends which are otherwise flat, and having a large aperture at the upper end with a rounded edge. Found at Cologne. *Height* $4\frac{1}{4}$ *in.*, *Diameter* 2 *in.*

275. Bottle, of colourless glass. This remarkable vessel has a cylindrical body, flattened shoulder, and short thick neck with a widely expanding thick lip, and a concave mouth, containing a decayed cork, partly covered with a corroded bronze capsule. It was found at Cologne hermetically sealed, as it remains, and contains a hardened mass of moveable yellowish substance. *Height* $4\frac{1}{4}$ *in.*

In Stow's "Survey of London," b. ii., c. 6., p. 428, ed. 1744, it is stated that when an ancient field called Lolesworth (now Spittlefield), was converted into a brickfield about the year 1576, "there were found divers phials, and other fashioned glasses, some most cunningly wrought, and some of crystal, all which had water in them . . . whilst others had oyle in them very thick and earthy in savour." A small Roman glass vessel, hermetically sealed, and half full of liquid,

is preserved in the Rouen Museum of Antiquities; "Archæological Journal," No. 9, March, 1846.

276. Bottle, of colourless glass, beautifully iridescent; with a rounded base, cylindrical body, and short neck. *Length* $3\frac{1}{2}$ *in.*

Fig. 67.

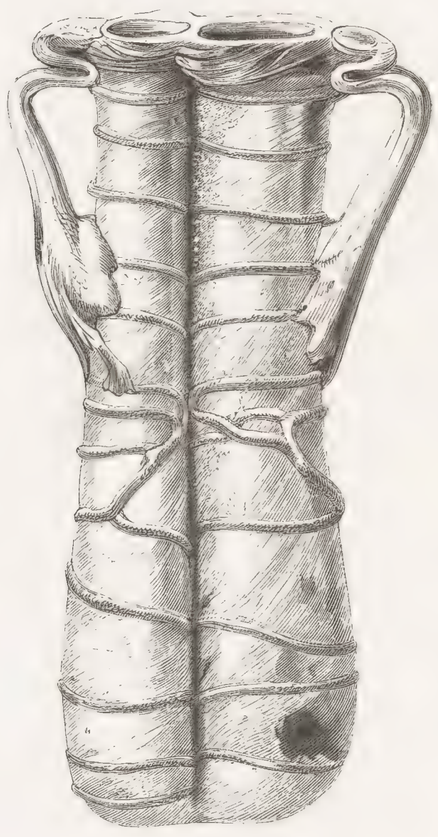

Fig. 68.

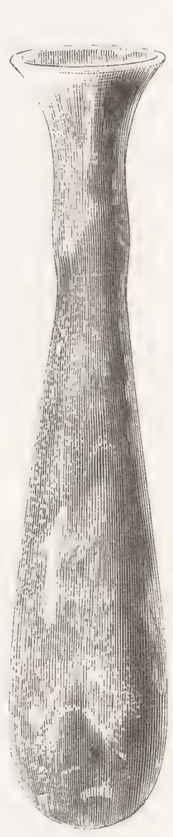

Fig. 69.

277. Unguentarium, of colourless glass, beautifully iridescent, and marked with rich purple and silvery spots and streaks over the conical body. *Length* $3\frac{1}{2}$ *in.* *Fig.* 67.

278. Twin Unguentarium, formed apparently by compressing a blown bulb of light green glass down the centre. It has two apertures at the top, and a spiral raised bold thread binding, as it were, the two tubes together, and two blue side handles. The beauty of this rare specimen is greatly enhanced by an exquisite creamy-looking lamina, displaying a rich mother-of-pearl iridescence which covers the whole surface. *Length* $4\frac{1}{2}$ *in.* (Fould Coll.) *Fig.* 68.

279. Unguentarium, of greenish white glass, delicately eroded. *Length* $4\frac{1}{2}$ *in.* *Fig.* 69.

280. Unguentarium, of greenish white glass; with pear-shaped body, and very long broad neck, slightly tapering upwards to an overhanging rim; this is partly covered with a delicate oxydised patina. *Height* $5\frac{3}{4}$ *in.*

281. Unguentarium, covered with a splendid iridescence, imparting to the surface a brilliant metallic lustre, principally golden hued, mingled with the richest greens, purples, crimson, etc.; the pear-shaped body is more elongated, and the neck shorter proportionally than in the preceding. *Length* $5\frac{1}{2}$ *in.* (Roussel Coll.)

282. Unguentarium, of green glass with a splendid iridescence from corrosion, the laminæ being of the most brilliant golden and metallic looking crimson, green, violet, and other hues; in form it expands slightly from a cylindrical neck into an elongated bulbous base. *Length* $4\frac{5}{8}$ *in.* (Rollin Coll.)

283. Unguentarium, of green glass, iridescent; in form like the preceding, but smaller. *Length* 3 *in.*

284. Unguentarium, of greenish glass, corroded; having a narrow neck, and expanding slightly towards the base into a very elongated bulbous form. *Height* $4\frac{7}{8}$ *in.*

285. Unguentarium, of colourless glass; this is like a very slender long tube, bulbous at the base and curving out at the mouth. *Length* $6\frac{5}{8}$ *in., Diameter of the bulbs* $\frac{1}{4}$ *in., centrally.*

286. Patera, of bluish green glass, circular with raised rim and sunk centre. The whole has been turned on the lathe; underneath are lathe-cut rings. *Diameter* $4\frac{1}{2}$ *in.* (Roussel Coll.)

287. An Armilla, of blue glass with a silvery patina. Found at Cologne. *Diameter* $2\frac{1}{8}$ *in.*

This object belongs to a class of antiquities that have from time to time been found in graves chiefly of barbarous races. Several have been discovered in Switzerland, and noticed in "Bonstettin, Recueil d'Antiquités Suisses."

288. Hair Pin, of very light greenish glass, with a flattened head but broken at the point. Found at Cologne. *Length* 6 *in.*

289. Pin, of very light greenish glass, corroded, and having a round head and a very sharp point. Found at Cologne. *Length* $3\frac{5}{8}$ *in.*

290. Pin, of colourless glass, with a dark blue club-shaped head, and tapering sharply to a fine point. Found at Cologne. *Length* $3\frac{1}{8}$ *in.*

291. Pin, of amber glass, corroded; with round head. Found at Cologne. *Length* $3\frac{3}{4}$ *in.*

292. Bodkin, of light greenish glass, lathe cut into facets. This is pointed at one end and perforated with a small hole at the other. *Length* $1\frac{3}{4}$ *in.*

293. Ring, of fine amber glass, almost entirely covered with a beautiful silvery and iridescent patina. Found at Nismes, and presented by George Witt, Esq., F.R.S. *Diameter almost* 1 *in.*

294. Bead, covered with a beautiful silvery and iridescent patina. *Diameter* $\frac{3}{8}$ *in.*

295. Glass Dice, of blue glass with dots of enamel, now decayed, but which seem to have been yellow.

296. Hollow Ball, of azure blue glass, iridescent, excessively thin and light in fabric; a very small neck, with an aperture, exists on one side of it. Found near Cologne. *Diameter* 3 *in.*

297. Glass Scoop, of greenish-blue glass, in form of the half of a bivalve shell. *Size* 5 *in. by* $2\frac{5}{8}$ *in.*

298. Bowl of a Spoon, of thick white glass with a delicate iridescence.

Found at Rome, near the wall of Servius Tullius. *Length* $2\frac{1}{2}$ *in.*, *Diameter* $1\frac{1}{2}$ *in.* Presented by A. W. Franks, Esq.

299. Bird-Shaped Vessel, of very thin grey-blue glass, formed rudely like a bird (probably for a toy), and having an orifice at the extremity of the tail. Found at Castra Vetera, Xanten. *Length* $5\frac{1}{4}$ *in.* (Houben Coll.). *Fig.* 70.

Fig. 70.

300. Fragment of a Patera, of intense green glass, with a narrow curved rim, deep margin and horizontal lip; a lathe-turned specimen. (Roussel Coll.) *Diameter* $5\frac{1}{8}$ *in.*

301. Fragment of the base and foot rim of a Glass Vessel covered with brilliant iridescence of golden, crimson, emerald green and violet hues. *Diameter* 3 *in.* (Roussel Coll.)

302. Fragment of Colourless Glass, the foot of a vase on which is a circle of raised tubercles. This specimen is covered with an exquisite opal-like iridescence. *Diameter* 3 *in.* (Roussel Coll.)

303. Fragment of a Cup, brilliantly iridescent; showing the remains of a raised white fillet and double festoon. *Diameter* 2 *in.*

304. Fragment of Colourless Glass; the foot, or cover, of a small vessel, preserved for the beauty of its iridescence. *Diameter* $1\frac{1}{2}$ *in.*

305. Fragment of Green Glass, covered with brilliant iridescence, varying in hue in different lights. *Diameter* 2 *in.* Presented by R. R. Holmes, Esq.

306. Fragment of Colourless Glass, splendidly oxydized, and having a stem and knob, probably a cover. *Diameter* $1\frac{1}{2}$ *in.*

307. Four Fragments of Roman Glass, flat and much oxydized; supposed to have been used for the window of a Roman Villa. Varying in length from $3\frac{1}{2}$ *in.* downwards.

308. Fragment of Greenish-toned Clear Glass, delicately iridescent; probably a piece of ancient window glass bent by heat. *Length* 2 *in.* Presented by A. Nesbitt, Esq.

This was found among the ruins of the old Cathedral of Trêves, and is mentioned, amongst other specimens, in the Preliminary Essay.

Though the following seven specimens of blown glass were found in the islands of the Greek Archipelago, and were brought from Athens, they may fittingly be described here: as firstly, although found in Greece, they do not differ from Roman glass; and, secondly, there is no proof that glass was manufactured in that country. For the latter reason glass specimens, usually termed Greek, have been classified in this Catalogue as either of Egyptian or of Roman origin.

309. Lachrymatory, of plain glass, corroded; this curious vessel has a very long neck, rising from a body formed of a small bulb, resting on a larger one with a flat base. *Height* $5\frac{1}{2}$ *in.*

310. Ampulla, of plain glass, beautifully corroded and iridescent. This curious specimen is similar in form to *Fig.* 1, *Coloured Plate* II., but is ornamented with seven bold equi-distant projections running from the base to the shoulder. *Height* $2\frac{3}{4}$ *in.*

311. Flattened Bottle, of plain glass, corroded; having a very long and thin neck, slightly tapering upwards. *Height* $8\frac{1}{2}$ *in.* *Diameter* $3\frac{3}{4}$ *in.*

312. Jug or Bottle, of plain glass, covered with a beautiful, delicate crimson, green, golden and pearly iridescence. The body is broad and cylindrical; the neck is very short and narrow, with a thick, slightly overhanging rim; and a handsome ribbed handle, of the same character as that shown in *Fig.* 28, but having two central ribs, is attached to the mouth and shoulder. *Height* $5\frac{3}{4}$ *in.* *Diameter* $3\frac{1}{2}$ *in.*

313. Cup, of plain glass, corroded, and excessively light and thin in fabric. In form it is cylindrical, with a slightly outward curving mouth and a rounded base; encircling the vessel are several lathe-cut bands. *Height* $3\frac{3}{4}$ *in.* *Diameter* $3\frac{1}{2}$ *in.*

314. Deep Plate, of plain glass, corroded and iridescent. This vessel is of fine material and workmanship. Round the base is a ring, whence the shallow bowl rises gracefully, in a bell-shape, up to a concaving broad margin, forming underneath an overlapping band which imparts an appearance of finish to the upper side of the margin. *Depth* $1\frac{5}{8}$ *in.* *Greatest Diameter* $6\frac{1}{2}$ *in.*

315. Small Bowl, of green-hued amber glass, of a low bell-shape, and resting on a ring of glass. *Height* $1\frac{3}{4}$ *in.* *Diameter* $3\frac{1}{2}$ *in.*

316. Small Amphora, of very light green glass, corroded; similar in form to *Fig.* 59. *Height* 2 *in.*

This was found with the specimen of Christian glass described in the next class.

E.—ROMAN GLASS WITH GILT DECORATIONS.

Fig. 71.

317. Remains of a shallow Dish, or disk, of clear glass, with decorations in gold leaf and enamel. This interesting object was discovered in 1866, with burnt bones (as stated) and various ornaments in jet, enclosed in a Roman tomb situated near the ancient church of St. Ursula, in the Ursulagarten Strasse, Cologne. A notice of the discovery was given in the "Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande," Heft xli. p. 132, and in Heft xlii. p. 168, accompanied with a coloured engraving, and an essay by Professor H. Düntzer, of Cologne. An account of it by Professor Heuser appeared in the "Bulletino di Archeologia Cristiana" (1866), and a third account in the "Pastoralblatt" for April, 1867, edited by Dr. Scheeben.

In this remarkable specimen the decorations are not protected, as they are ordinarily, by a thin coating of glass, and they have, therefore, suffered from the effects of time. The gilding is varied in tint, so as to produce greater effect, and the enamelled decorations are in blue, green, and red. The designs were as usual produced principally by scratching away portions of the gold leaf, so as to define the figures with their requisite outlines and shading tints. In the good drawing of the figures, in the richness of the enamelled decorations and accessories and

the variety of the subjects, this specimen is probably equal to any now known to exist.

The centre of the Dish is, with the exception of a few small fragments, wanting. It seems to have been a circular medallion about $3\frac{1}{2}$ in. in diameter; and on one of the fragments may be distinguished the legs of an animal and apparently a human foot. The animal appears to have been a sheep, and it is, therefore, probable that the subject was the *Pastor Bonus*, or Good Shepherd, represented, no doubt, in the usual manner with a sheep on his back and a sheep on each side of his feet. Near the margin of the medallion, but not separated from it by an inner border, as indicated in the engraving above noticed, was an inscription of which the letters EO . . . DVLCI . . . alone remain.

Around the space once occupied by the medallion is a broad band, with eight subjects, divided from each other by gilt columns or pilasters; outside the whole is a serrated band of gold. The subjects are as follows:—

I. *Moses.* The law-giver is draped but with bare feet; he leans forward and holds his wand towards the lower part of a stream of water, in which may be distinguished two hands, two feet, and a head. The form of the stream is not unlike representations of that issuing from the rock struck by Moses, a common subject in early Christian art; but the action of Moses is here different, and the fragmentary human figures can hardly be intended to represent the thirsting people of Israel. It is more probable, therefore, notwithstanding Professor Düntzer's opinion, that this subject was intended to represent the passage of the Red Sea, and the overwhelming of Pharaoh and his host in the waters. This seems, moreover, to be the opinion of the writer in the "Pastoralblatt."

II. *Jonah thrown overboard.* Two men in a ship, with a very large sail, are throwing over the prophet, who is being swallowed up by the usual conventional monster. In one corner is a dove, which is conjectured to allude to the dove of Noah, a subject occasionally mixed up with that of Jonah.

III. *Jonah.* In front the prophet is seen coming out of the mouth of the monster; in the background he is reclining under the gourd.

IV. *Daniel in the Lions' Den.* Daniel is clothed in a short dress with crimson stripes, and is standing between four lions with his hands stretched out in the attitude of prayer; in the background are trees.

V. *The Fiery Furnace.* The three young men are not draped, and are standing in an open furnace of masonry, looking away from each other, with their hands stretched out; between them rise flames represented in red enamel.

VI. *The Sacrifice of Isaac.* This subject is unfortunately much injured. A draped figure is placing his hand on the head of a child: to the right is a wall, and in the background trees. At the feet of the draped figure an animal seems to be represented; if so the subject can only be the sacrifice of Isaac. The attitude of the child is hardly, however, the conventional one of Isaac, and would answer as well for the baptism of our Lord. Professor Düntzer considers it to be the prophet Habakkuk being brought by the angel to Daniel, and therefore to

belong to the subject No. 5, from which, however, it is too far separated. The writer in the "Pastoralblatt" considers it to relate to the miracle of the restoration of the blind to sight.

VII. *The Nativity.* On a low wall is resting the Holy Child, tightly bandaged in swaddling clothes. Behind is a figure, apparently of a female, with long hair and with crimson stripes on the dress, who is holding up her hands extended in prayer. In front are two animals, one of which is an ox; the other, no doubt an ass, is much injured. From not having noticed the child in swaddling clothes, this subject has been hitherto misunderstood, and has been called by Professor Düntzer "Susanna and the Elders," etc. The figure in the background seems to be one representing the Virgin. If a male figure, it would represent the Adoration of the Shepherds. The Nativity, under any form, is very rare in early Christian works of art, and has not occurred in any other specimen of glass.

VIII. *The Paralytic Man.* A figure in a short dress, with red stripes, is carrying on his shoulders a very large bed; the four legs can be distinctly made out, and from the upper end rises a curved back with three cross bars. This is a very common subject in Christian glass. Professor Düntzer, wishing to consider all the subjects to be derived from the Old Testament history, has construed this design into Samson carrying off the gates of Gaza.

Such are the subjects which decorate this remarkable specimen; many of them are, unfortunately, in fragments, and the surface has suffered from decay, but sufficient remains to show the fine style of art by which the specimen is characterised. It may possibly be as early as the third century of our era, as before intimated. It is stated to have been found with burnt bones, and, therefore, according to the usual opinion, with the remains of a heathen. This is in itself a remarkable circumstance, and not admitting of easy explanation, but it tends to prove that the deposit belongs to an early date.

Until the discovery of this and another specimen at Cologne (the fragments of a shallow vessel, contained in the collection of M. Disch, of Cologne, and noticed in the "Jahrbücher des Vereins, etc., im Rheinlande," Heft. xxxvi. Taf. iii.), no Christian glass had been discovered out of the catacombs of Rome, and it had been considered that they were peculiar to that city.

To the same class belong the specimens already described under Nos. 120, 121, but until the acquisition of this important specimen it had not been thought necessary to make a separate class for glass with gilt decorations. This interesting object was acquired from M. Edouard Herstatt of Cologne, May, 1867, together with a plain glass bottle (No. 316), five jet ornaments, and a cockle-shell, found in the same interment. The *Diameter* is now about $7\frac{1}{4}$ *in.*, but in its original state it was evidently somewhat larger. It is represented in *Fig.* 71, in which the black work indicates gold; the horizontal lines, parallel with the circular form of the plate, denote bluish water; and the radiating lines, emerald green trees. This engraving has been copied from that published in the "Jahrbücher," and does not represent the smaller fractures.

PART II.

MEDIÆVAL AND MORE RECENT GLASS,

Down to the Commencement of the Eighteenth Century.

MEDIÆVAL AND MORE RECENT GLASS.

I.—GLASS IN WESTERN EUROPE, A.D. 400—1000.

Teutonic Glass.

Fig. 72.

318. A Vase, of blue glass, peculiar in hue and texture, being thick, and abounding in alkali which seems to have caused the surface to decompose. It has a wide lip and a fluted body and foot; from notches on the rim and holes in the body it is evident that this vessel once had handles. This is rendered certain by a vase of the same peculiar texture and hue which is preserved in the British Museum, and was acquired at the sale of the Pourtales Collection for 2,100 fr. The latter specimen was found near Amiens, the Samarobriva of the Romans, and is represented in the accompanying woodcut, *Fig.* 72. The handles, it will be seen, are bold and massive; the illustration, in other respects, represents the vessel belonging to this collection, as it might be presumed to have appeared when perfect. *Height* $6\frac{3}{8}$ *in.* *Diameter* $5\frac{1}{4}$ *in.*

It is probable from the clumsiness of its form that this cup dates from the 5th or 6th century. It resembles in its shape the vases to be seen on Christian sarcophagi of that period.

319. A Drinking Cup, of white glass, with rounded base and slightly fluted body. It is very light, and horny in texture. *Height* $3\frac{5}{8}$ *in.* *Fig.* 73.

Like most drinking vessels of a Teutonic origin, this cup cannot be made to

Fig. 73.

stand properly by itself, owing to the rounded form of its base. It was found at Selzen, in Rhenish Hessen, a locality which has furnished a great number of antiquities of the early German or (as we should say) Saxon period. *See* Lindenschmidt, "Das Germanische Todtenlager bei Selzen," where five specimens are engraved.

II.—GLASS OF BYZANTIUM, A.D. 400—1300.

Fig. 74.

The excessive rarity of any specimens of glass, which can be clearly traced to a Byzantine origin, renders this class one of which it is difficult to obtain examples. As has been stated in the Preliminary Essay, the only undoubted specimens of Byzantine vessels, which are known to us, are preserved in the Treasury of St. Mark, Venice. The following, however, although the first two of them are not undoubtedly of Byzantine origin, may well find a place under this head.

320. Bowl of transparent crystalline glass, hemispherical, but spreading out slightly at the margin, and decorated on the exterior with the subject of Diana and Actæon, vigorously executed in deep intaglio, partly cut on a wheel, and partly finished up with engraved lines. Viewing the subject from within the bowl, it may be described as follows. To the right, beneath an arch, indicated by a double line of short thick strokes, and meant to represent a grotto or bower, is seen the goddess, kneeling on one knee and looking back; round her head she has a nimbus, and on the top four projecting stiff curls, possibly meant to indicate her astonishment; she holds in her left hand a jug, which she seems to be about to fill at a pool of water below her; looking over the edge of the arch is Actæon, with the horns sprouting from his forehead; a reflection of his head may be seen in the pool of water below the goddess. To the left is a dog barking, near to which is a stag symbolising the final transformation of Actæon. Dispersed about is foliage; between the figures their names, *AKTAIΩN* and *APTEMIC*, are engraved. The edge of the bowl is ornamented with a running pattern, engraved with a point. *Height* $2\frac{3}{8}$ *in.* *Diameter* $4\frac{3}{4}$ *in.* *Fig.* 74 represents the form of the bowl; and *Fig.* 75 shows, in outline, the style and the whole subject of its decoration viewed from the exterior, but indicating only the perspective, and not the real distances of the figures from each other.

A bowl of the same workmanship as this was found at Cologne, and is preserved in the Berlin Museum. It represents Prometheus making man, and has Greek inscriptions upon its surface. An engraving of it is given in the "Jahrbücher des Vereins von Alterthumsfreunde im Rheinlande," Heft. xxviii. p. 54.

Fig. 75.

From the Greek inscriptions engraved on these two bowls, it is probable that both were made at Byzantium, although they must be early specimens of the manufactures of that city. With regard to the Pagan nature of their devices, it is now well known that, down to a comparatively late date, the Byzantine artists made use of Pagan myths for the decoration of works of art for secular purposes, as shown by some of the carved ivory boxes that are preserved in various collections.

The following specimen, and, prôbably, No. 171, may be referred to the same origin.

321. Bowl, of the same kind of glass and form as that last described, but somewhat deeper in its proportions. Like the vessel No. 171, Fig. 38, it is ornamented with a zone of lathe-cut elongated depressions (but oval in this case), commencing immediately beneath the curved margin, and extending to three rows, occupying with the margin about two-thirds of the height of the bowl; below this is a very effective band of lathe-cut circles, each of which has a raised centre, and is separated from its neighbour by a thick vertical line connecting an upper and under band of horizontal ovals which border the circles; beneath these are three rows of narrow

oval depressions, radiating from a small circle occupying the centre of the base, and each zone or band is bounded by a thin line. *Height* $3\frac{1}{2}$. *Diameter* $5\frac{5}{8}$ *in.*

This curious bowl, and that last described, were found in a tomb at Leuna, near Merseburg, in Saxony, a notice of which has appeared in the "Beilage zum Anzeiger für Kunde der Deutschen Vorzeit," March, 1866, and in the "Leipziger Tageblatt und Anzeiger," Dec. 4th, 1866. They were deposited with a human skeleton, together with the following objects, which have been presented by Mr. Slade to the British Museum. Three grey urns of a late and apparently Teutonic pattern; a red bowl of the so-called Samian ware, but of a coarse and late fabric; two bronze spurs; four bronze fibulæ; a bronze buckle; two bronze saucepan-shaped vessels, apparently of late Roman work, one of which is pierced as a strainer; and two small bronze arrow-heads, or models of spears. The form of the buckle is of a Teutonic character, and there is nothing Roman in the locality or in the nature of the interment; it is probable, therefore, that the tomb was that of a barbarian who had acquired some of the objects buried with him, and especially the glass vessels, from other countries.

Two bowls similar to this one (but much smaller and broken) were discovered in a tomb at Osztropataka, in Hungary, together with a wooden bucket, some singular stamped plates of silver, perhaps part of a shoe, a comb, and gold ornaments of various kinds. With them was a gold coin of Herennia Etruscilla, wife of Trajanus Decius, who ruled from A.D. 249-251. This coin had been worn as an ornament, and very possibly at a much later period. An account of the discovery, by Dr. E. Henszelmann, has appeared in the Transactions of the Central Commission of Vienna.

322. COIN or MEDALLION, in pale green glass, impressed with a circular stamp representing an imperial bust holding an orb; around is the inscription + ЄΠΙ ΚΟϹΜΑ ЄΠΑΡΧϒ.—Under the Eparch Cosmas. This rare specimen was found on the site of Porphyreon, an ancient town on the sea coast of Syria, near Saida, and now buried in sand. It was in the Eparchate of Phœnicia Maritima. Presented by M. Charles Schefer, *Premier Secretaire Interprête* to the Emperor of the French, and obtained by him on the spot. *Diameter* 1 *in.*

A similar Medallion is in the British Museum, which was obtained by Mr. Newton in the East, and bears a monogram with the inscription ЄΠΙ ΙѠΑΝΝΥ ЄΠΑΡΧϒ. Another with the name of the Eparch Theodorus has been noticed in the Preliminary Essay.

323. CAMEO MEDALLION of deep blue glass, rendered partially opaque by the number of bubbles which it contains; it represents, in relief, a bust of our Lord full-faced. He has a jewelled nimbus and the right hand is blessing in the Greek form; the left hand holds a book; at the sides of the head are the letters IC. XC. (*Ἰησοῦς Χρίστος*). The similarity of this figure to that which occurs on the coins of the Emperor Basil II. justifies us in fixing the date of it as not later than the end of the 10th century. The medallion was obtained in Constantinople by the Hon. J. Leicester Warren. *Diameter* $1\frac{4}{10}$ *in.*

III.—GLASS OF EASTERN NATIONS.

A. Arab Glass.

Fig. 76.

The oldest specimens of Arab glass to which a date can be put are some singular coins, or counters, impressed with a die when hot, generally on one side only, but sometimes on both sides. They seem to be peculiar to the Fatimite Khalifs of Africa, consisting of fourteen princes whose reigns extended from A.D. 908—1171. Specimens of all the khalifs have been preserved, and forty-one varieties are described in Pietraszewski's work on Oriental Coins, where some of them are engraved. They are to be met with in the following colours: in transparent colours, white, lilac, deep crimson, amber, pale green, and yellow; in opaque, are white, turquoise, and variegated white and purple; all of which, excepting turquoise, are to be found in this collection.

324. Two Coins, one of them is green, and inscribed "Imam Maad," the other white, "Maad Imam." This is the Khalif Al-Moazz ledin-illah Abu Tamim Maada, who reigned from A.D. 952 to 975. *Diameter* $\frac{1}{2}$ *in.*

325. A Coin of greenish glass, inscribed "Al-Hakim," the name of the Khalif Al-Hakim abu-Ali Mansur, who reigned from A.D. 996 to 1020. *Diameter* $5\frac{1}{8}$ *in.*

326. A Coin of greenish glass, inscribed "Dhahir li-izoz-din-Illah," who reigned A.D. 1020 to 1036. *Diameter* 1 *in.*

327. A small Coin of amber-coloured glass, inscribed "Al-Imam Al-Dhahir." This is probably the same khalif as the last. *Diameter* $\frac{1}{2}$ *in.*

328. A Coin of greenish glass, with a circular inscription enclosing another

reading, "Al-Mostansir Billah, Commander of the Faithful." This was a khalif who reigned A.D. 1035 to 1094. *Diameter* 1 *in.*

329. Three Coins, one of them crimson, another amber, the third pale green, with the name of "Al-Mostansir Billah," A.D. 1035 to 1094.

330. A Coin of greenish glass, oxidised, the khalif's name is illegible; on the reverse is the profession of faith. *Diameter* $\frac{7}{8}$ *in.*

Besides the above there are fourteen small Coins of various colours and sizes, with Arabic inscriptions, mostly illegible.

331. A Coin of amber glass, with a double triangle. *Diameter* $\frac{3}{4}$ *in.*

332. Three small Coins without inscriptions; one of them seems to have a bust in relief.

333. Hanging Lamp in the form of a vase, having six loops for suspension; it is made of very thick transparent glass somewhat horny in texture. The whole surface has been richly decorated with gilding and enamel, but much of the former has been rubbed off. The upper part is ornamented with three medallions, enclosing circles surrounding the device of the person for whom the lamp was made. This device consists of a broad band, once gilt, with a red cup on it, the space above being coloured red, and that below black. The border of each medallion has been in gilt arabesque with red details. The spaces between the medallions are filled with inscriptions in fine flowing characters, of which the letters are in blue enamel intertwined with scrolls in white and red enamel; the ground has been originally gilt. The inscription is as follows:—

الله نور السموات والارض مثل نوره كمشكاة فيها مصباح

It is a passage from the Koran, chap. 24 v. 35:—"God is the light of heaven and earth; the similitude of his light is as a niche in a wall wherein a lamp is placed."

Below is a narrow band of arabesques in gold and red, interrupted by six small medallions, three of which enclose monsters on a blue ground, and the three others flowers like fleurs-de-lis, in yellow, green, and red.

On the upper part of the body of the lamp are inscriptions of a still bolder character than the others, outlined in red, and of which the letters have been originally in gold. They have a blue enamelled ground interspersed with leaves and scrolls. The inscription is as follows:—

برسم المقر الاشرف العالى المولوى المخدومى السيفى شيخو الناصرى اعز الله نصره

"For the illustrious Lord El-Maulawi el-Makhdoomi el-Seifi Sheikhoo en-Nassiri, may his victory be exalted."

The lower part has on it six medallions, three of them with the device of a cup, as described above, but with borders of scrolls on a blue ground; the other three medallions have arabesque patterns on a blue ground, with borders of arabesques in gold and red; between these medallions are flowers in red, white, green, and yellow enamel.

In ornamenting this fine specimen the design seems to have been first traced in gold, the portions intended to show that metal being gilt, and other parts

enamelled in blue, red, green, yellow and white; some of the more delicate arabesques appear to have been painted in red upon the gold. The wear of time has removed most of the gold, excepting where protected by the enamel.

With respect to the history of this lamp, it may be stated that it seems to have been made for one of the most illustrious of the Emirs of Egypt in the 14th century, of whom M. Charles Schefer has been good enough to furnish the following particulars.

Seif-eddeen Sheikhoo en-Nassiry el-Omary was slave to Melik en-Nassir Mohammed ben-Kalaoon, Sultan of Egypt from 1293 to 1341. He first attained to some notice in the reign of Mozaffer Haggi, son of Mohammed ben-Kalaoon, and in the reign of the succeeding Sultan, Melik en-Nassir Hassan, he became a member of the Privy Council of that Sultan, and all petitions passed through his hands. His influence was supreme, and he took a part in all the intrigues of that period, especially in the circumstances that led, in 1354, to the Sultan Melik es-Saleh being deposed in favour of Melik en-Nassir Hassan.

From this time he exercised an overwhelming influence in all matters of state. From his great power and his wealth he was called the Caroun of the age, and the Joseph of Egypt. His immense fiefs and other property in Egypt and Syria produced, it is said, a daily sum of 200,000 silver dirhems.

On the 8th of the month Chaaban, in the year 758 (A.D. 1356) he was sitting in the hall of justice at Cairo, when a slave of the Sultan rushed at him and wounded him with a sword on the head and hands. The murderer was nailed to a cross and thus carried through the streets of Cairo. Sheikhoo died of his wounds shortly after. In the year 756 (A.D. 1355) he had caused a mosque to be built near the foot of the citadel of Cairo, which was reputed to be one of the finest ever constructed. The following year he founded in connection with the mosque a convent of Soofis, as well as courses of lectures in theology for the four orthodox rites.

It is probable that the lamp under notice was brought from the mosque in question. *Height* $14\frac{1}{4}$ *in. Diameter* $9\frac{3}{4}$ *in. at the summit, and* 11 *in. near the base. Coloured Plate* VIII.

334. BOTTLE, of transparent glass of horny texture and colour, and thick in substance; the surface is covered with minute ornaments in gold and enamel, now much worn; the neck is decorated with a band, representing a running scroll, composed chiefly of birds with extended wings, on a blue ground; above and below are scrolls and inscriptions executed originally in gold with red outlines. On the upper part of the body is a band with four medallions, separated by flowers in various colours; in each is a lion, in gold on a blue ground. Below this is a broad zone with a diaper composed of pairs of birds *vis-à-vis*, and once gilt; interspersed among them are small enamelled flowers. Below the zone is a narrow border, divided into eight compartments by small medallions containing flowers; the compartments are alternately filled with lions passant, and corresponding inscriptions, all executed in outline. The inscriptions are portions of a series of

ARAB LAMP.

ARAB BOTTLE.

titles inserted here merely for ornament. *Height* $10\frac{7}{8}$ *in. Diameter about* 7 *in. Coloured Plate* IX.

335. Bowl and Cover, of dusky transparent glass; the bowl has lost its foot, which has probably been a tall one, as shown by a perfect specimen in the collection of M. Charles Schefer, at Paris. The upper part of the bowl is contracted, and the lower part ribbed; the cover is dome shaped, and is surmounted by a bulbous ornament. Round the rim of the bowl is an elegant ornament in gold; beneath this is a band bearing eight medallions with stiff flowers in enamel, between which are gilt sphinxes with a background of scrolls; below are scattered a few gilt and enamelled ornaments.

The cover is decorated with four medallions, on which are monsters, once gilt, on blue enamelled grounds; the panels between them contain various animals, above and below are elegant arabesque borders; on the ornament surmounting the cover are three medallions, each enclosing the same inscription, which is as follows: —

عز لمولانا السلطان

"Glory to our Lord the Sultan."

Height $10\frac{1}{2}$ *in. Diameter* $9\frac{1}{4}$ *in. near the base.*

This specimen was obtained at Naples, and presented by Alexander Nesbitt, Esq.

336. Gourd-shaped Bottle of dull ruby glass, somewhat decomposed on the surface. The pointed neck and the rounded base are both set with silver gilt of an unusual style and evidently of considerable antiquity. This bottle has been used to contain the antimony or kohl, used by the women in the East for their eyes, and was purchased at Cairo. *Height* $3\frac{1}{2}$ *in. Fig.* 76.

337. Hand Grenade, of opaque red glass, globular in form, and with a broad flat mouth but no neck. *Height* $3\frac{3}{8}$ *in. Diameter* $3\frac{3}{8}$ *in.*

This object was obtained by Charles Newton, Esq., (then her Majesty's Vice-Consul at Mytilene), from the arsenal at Rhodes, and had probably remained there from the time of the taking of Rhodes by the Turks, in 1523. It was probably made for the knights in one of the glass manufactories in Syria.

338. Hand Grenade, similar in form to the last, but with a short neck and no lip. It is of a dark green transparent glass, and of considerable thickness. This specimen was obtained from the arsenal at Rhodes, by M. Charles Schefer, and by him presented to this collection. *Height* $3\frac{3}{8}$ *in. Diameter* $3\frac{3}{8}$ *in.*

339. Six glass Bracelets, of which four are formed of various coloured threads twisted together, one is of greenish glass twisted, and the sixth of brown glass. Made at Hebron, whence they were brought by M. Charles Schefer. *Diameter of each about* $2\frac{5}{8}$ *in.*

340. Finger Ring, of bright green glass. Also made at Hebron. *Diameter* $\frac{7}{8}$ *in.*

A glass manufactory has long existed at Hebron, or El-Khalil, where lamps and bottles are made. The manufactory is alluded to, according to Dr. Robinson, by

Gumpenberg, in 1449, and by Felix Faber, in 1483. It is thus noticed by Dawson Borrer in his "Journey from Naples to Jerusalem," 1845, p. 454: "One of the chief articles of sale are rings of coloured glass, and bracelets of the same, with which the arms and fingers of fair Syrians are generally loaded. The lamps fabricated here are exported to Egypt and other countries in considerable quantities, for the adornment of mosques, etc."

B. Persian Glass.

Fig. 77.

341. Bottle, quadrilateral, and having a very short neck, of dull blue glass, ornamented with gilt work round the neck; below are brightly enamelled paroquets, and flowers and leaves connected together by gilt stems. *Height* $5\frac{1}{8}$ *in. Fig.* 77.

342. Basin and Cover, of colourless glass, ornamented with raised blue flowers having green stems and leaves, all edged with green outlines; the knob of the cover and margins of both the cover and coupe are gilt. *Height* 5 *in. Coloured Plate* X., *Fig.* 2.

343. Ewer and lid, of brilliant blue glass, elaborately ornamented with circular entablatures, each consisting of a conventional gilt flower spray enclosed within a gilt foliaged scroll. The shoulders also, and other parts of this splendid looking vessel are profusely covered with elegantly diversified gilt work. The lid is fastened to the neck with a metal ring, to which a hinge is attached. *Height* 11 *in. Coloured Plate* XI.

This is probably of the time of Shah Abbas.

PERSIAN & VENETIAN GLASS.

PERSIAN GLASS.

344. Bottle, cylindrical; around the neck are two pairs of encircling bands, each pair being composed of a row of blue dots on a blue riband adjoining a row of white dots with crimson eyes; adhering to the lower pair is a row of crimson

Fig. 78.

drops alternating with white and green crescents; beneath this it is ornamented on the body with a zone of brightly painted flowers, consisting of the belladonna, hyacinth, tulip, narcissus, lily of the valley, and a red flower, on a spray of which a goldfinch is perched. The stopper is of stamped silver. *Height* $5\frac{1}{8}$ *in.* *Fig.* 78.

This may be Turkish and not Persian.

C. CHINESE AND JAPANESE GLASS.

The Chinese and Japanese, to a certain extent, must have been for a long time acquainted with the art of making glass in order to obtain the vitreous colours employed in their enamels and porcelain. No specimens, however, of any great antiquity have been as yet brought to light. It has, therefore, been thought desirable to illustrate this section with examples that are mostly of a more recent period than that to which the collection has been ordinarily restricted. The Chinese specimens are generally imitations of natural substances.

345. Bowl and Cover, of mottled glass, of a dull red colour, lined with yellow so as to resemble tortoise-shell. This material is of considerable thickness and semi-opaque. *Height* $4\frac{3}{8}$. *Diameter* $3\frac{3}{8}$ *in.*

Seven pieces of the same description as this are preserved in the British Museum, and as they are derived from the Sloane Collection, they cannot be later than the early part of the 18th century. In the original Catalogue they are stated to have been made of flints carried from England.

346. Snuff Bottle, of large size, of opaque white glass, coated externally with a semi-transparent deep blue glass, which is cut away so as to leave various designs in relief, arranged in eight compartments, each of which has a central engraved ornament raised above the other parts and almost black in appearance. *Length* $3\frac{3}{8}$ *in.* *Diameter* 3 *in.*

347. Snuff Bottle, of opaque white glass, coated with a bright blue opaque glass intervening so as to represent eight horses in various attitudes, some of which are standing on a blue ground. The stopper is set with a red glass head imitating a ruby. *Length* $2\frac{3}{4}$ *in.* *Diameter* 2 *in.*

348. Snuff Bottle, in the shape of a gourd or fruit, of an orange colour with green leaves. *Length* $2\frac{1}{4}$ *in.* *Diameter* $1\frac{1}{8}$ *in.*

349. Snuff Bottle, in the shape of a flattened flask of a deep blue or violet colour. *Length* $2\frac{3}{8}$ *in.* *Diameter* $1\frac{3}{8}$ *in.*

350. Snuff Bottle, of similar shape to the last, but with projecting bulbs on the shoulders; it is of transparent light blue glass sprinkled with metallic specks. *Length* $2\frac{7}{8}$ *in.* *Diameter* $1\frac{3}{8}$ *in.*

351. Quadrangular Snuff Bottle, of greenish glass rendered partly opaque, and having a crimson glass stopper. *Length* $2\frac{1}{2}$ *in.* *Diameter* $1\frac{3}{8}$ *in.*

352. Three Snuff Bottles, of flattened forms, imitating tortoise-shell, green jade, and avanturine. *Length of each* $2\frac{3}{8}$ *in.* *Diameter* $1\frac{7}{8}$ *in.*

353. Two Snuff Bottles, of flattened forms, one of which is of thick and the other of amber glass. *Length of each* $2\frac{3}{8}$ *in.* *Diameter* $1\frac{7}{8}$ *in.*

354. Snuff Bottle, in form like the preceding, of semi-transparent glass, slightly marbled with lighter veinings gradating into almost white. *Length* $2\frac{3}{8}$ *in.* *Diameter* $1\frac{7}{8}$ *in.*

355. Three Beads, of opaque yellow glass, with green and blue ornaments in relief and twisted into a series of curls. *Diameter* 1 *in.*

These and the following are stated to be Japanese.

356. Three Beads, of opaque white glass, marbled with red, and fluted. *Diameter* 1 *in.*

IV.—GLASS IN WESTERN EUROPE, A.D. 1000—1300.

Fig. 79.

No glass vessels bearing distinct proofs of having been made in Western Europe and belonging to this period are known to exist; the two glass cameos, and the few fragments from ancient windows, described below, exhibit, however, the texture of the glass of the period, as well as some of the tints which were then manufactured.

357. A Roundel from a window, of a horny yellow tint, ornamented with foliage on a cross-hatched ground. Early 13th century. *Diameter* $1\frac{7}{8}$ *in.* *Fig.* 79.

358. Five fan-shaped pieces, from a stained glass window, ornamented with leaves or petals. The tints are green, yellow and ruby; the latter is what is technically termed streaky, owing to imperfections in the manufacture which added to the artistic appearance of the glass. Early Decorated in style, and probably of the second half of the 13th century. *Length of each about* $2\frac{3}{8}$ *in.*

359. Oval Cameo of opaque red glass, of a dull lightish colour and slightly streaky; on it is represented a figure of St. James the Greater standing between two kneeling pilgrims holding staves, and wearing broad brimmed hats. Round the head of the saint is the inscription S. IACOB. *Size* $1\frac{1}{8}$ *in. by* 1 *in.*

This Cameo is of Italian origin, and may be referred to the close of the 13th century. In the British Museum are preserved four specimens of the same kind; they represent the Nativity, Crucifixion, Seven Sleepers, and St. John the Baptist; the last of these is very similar in treatment to this Cameo.

360. Oval Cameo, of dark brown glass, representing the Nativity. The Virgin is lying swathed up; behind is the Child in a similar position, with the heads of two animals in the back-ground; to the left is St. Joseph, seated. In the field are a star and a crescent. *Size* $1\frac{1}{4}$ *in. by* 1 *in.* This and the preceding specimen were presented by A. W. Franks, Esq.

V.—GLASS OF VENICE,

From 1300 to the commencement of the Modern Period.

A. Enamelled.

Fig. 80.

361. Standing Cup, of rich emerald green glass: it has a fluted stem and knop, and a spreading foot with raised ribs, all enriched with powdered gold. The bowl is ornamented with two medallions opposite to each other. Each medallion contains a portrait; and is surmounted with garlands supported by Cupids. One of them is that of a lady, with auburn hair, smelling a bouquet; her dress, which is in the style of the fifteenth century, is of a brown colour, relieved by blue across the chest, and has white puffed sleeves (*Fig.* 80). The other portrait represents a gentleman, also in the costume of the fifteenth century. In front of his face is a scroll, bearing the motto Amor. vol. Fee (*Love requires faith*). *Height* $8\frac{3}{4}$ *in.* *Diameter* $4\frac{1}{2}$ *in.* *Coloured Plate* XII.

A coloured representation of this fine cup is given in Labarte's "Histoire des Arts Industriels," Atlas, Plate cxxxiv. It formed part of the collection (No. 1,274) of M. Debruge-Duménil, who purchased it in Italy for 172 francs; it passed afterwards into that of Prince Soltykoff, at whose sale it was purchased for 5,950 francs, to be added to this collection.

362. Large Standing Cup and Cover. The bowl of this fine mediæval vase is ornamented with oblique curving gilt ribs; above these is a row of red dots, and a marginal pearl-edged band of gilt imbrications, each containing a central blue enamel dot. The cover has similar ribs, and is surmounted with a flat-headed knob, on which is visible, encircled with a blue ring, a partially-defaced shield of arms, of an early form, which seems to have been quarterly,

VENETIAN ENAMELLED GLASS.

1 and 4 arg. a cross gu., 2 and 3, or a bend gu.; any minor charges are now invisible.

Around the base of the cup is a denticulated rim edged with red enamel, and having gilt points with large blue enamel dots between them. The stem has vertical gilt ribs, and around the foot is a raised ring of glass decorated with intertwined stripes of white and blue enamel, below which is a band of opaque white rings strung together by a red cord. *Height* $16\frac{1}{2}$ *in.* *Diameter at the mouth* 8 *in.* *Fig.* 81.

Fig. 81.

This vase is remarkable for its size; it is also one of the earliest productions of the Venetian glass manufacturers which have been preserved, and the oldest example of their workmanship contained in this collection. It is represented in the "Art Treasures of the Manchester Exhibition," and in "Le Cabinet de l'Amateur" (No. 3, Mai, 1861), where it is described as being of a very rare form.

363. Blue STANDING CUP, of a fine sapphire hue, having a stem and expanding foot with raised ribs sprinkled with gold. The bowl is cylindrical, with a notched moulding at its base, and surrounded by two jewelled and gilt bands between which is represented a procession of figures, with a back-ground of pyramidically-clipped trees, all executed in enamels of various colours, heightened with gold. The principal subjects of the design represent, on one side, Venus seated in a fish-shaped car, preceded by Hymen holding a torch; after which comes a centaur bearing a youthful figure, and grasping the hand of a cavalier, armed *cap-à-pié*, in the fashion of the early part of the fifteenth century; on the opposite side is another triumphal car, etc. *Height* $6\frac{1}{2}$ *in. Diameter* 5 *in. Coloured Plate* XIII.

This singular and early specimen is figured in Labarte's "Histoire des Arts Industriels," Plate cxxxiii., where it is ascribed to the Venetian school of the first half of the 15th century. It was originally acquired from M. Lhérie for 180 francs by M. Debruge-Duménil, and it was purchased for 4,032 francs on the same occasion as No. 360. It may be remarked, likewise, that these two specimens were the finest enamelled glasses in the Debruge Collection, and were not equalled by any of Prince Soltykoff's more recent acquisitions.

Fig. 82.

364. Blue STANDING CUP, of sapphire hue, ornamented round the margin with a gilt twisted or chain border, edged with pearls; beneath this is a broad

Plate XVI.

VENETIAN ENAMELLED GLASS.

zone of gilt leaflets and white enamel conventional flowers surmounting a second gilt chain border edged with white enamel pearls and drops. The rim of the base is serrated and pearled; the stem and foot are fluted and covered with powdered gold. *Height* $6\frac{1}{2}$ *in.* *Fig.* 82.

365. Blue Cylindrical Goblet, of sapphire hue. In the centre is a broad zone of gilt imbrications running in adjoining diagonal rows, and overlaid respectively with a series of large green, red, and blue spots or eyes, each of which lies cradled within a white enamel crescent. A gilt and gemmed border, very similar to the marginal border shown in *Coloured Plate* XIII., lies above, and another below the zone, each externally edged with enamel pearls arranged in triangles. *Height* $4\frac{1}{4}$ *in.* (Debruge Coll.) ("Manchester Art Treasures, Vitreous Art," *Plate* 2. *Fig.* 3.)

Fig. 83.

366. Blue Salt-cellar, of sapphire hue, entirely covered with gilt imbrications, each edged with pearls and having a gemmed centre. *Height* $2\frac{1}{4}$ *in.* *Diameter* $3\frac{1}{2}$ *in.* (Debruge Coll.) *Fig.* 83.

367. Blue Bowl, of sapphire hue, brilliantly ornamented with a broad zone of gilt and gemmed imbrications, each edged with pearls. The zone lies between two gilt and gemmed bordering bands. On the bottom of the interior are the letters 𝔶 𝔥 𝔰 in gold. *Height* $2\frac{3}{8}$ *in.* *Diameter* $2\frac{3}{8}$ *in.* *Coloured Plate* XIV. *Fig.* 2.

368. Small Green Bowl, in form somewhat like the upper part of *Fig.* 82; it has a gilt band round the margin, bearing sapphires and edged with pearls: beneath this are two raised lines and sixteen diagonal rows of large raised yellow enamel spots, having thick reddish purple edgings; the base is surrounded with denticulations. *Height* $2\frac{3}{4}$ *in.* *Diameter* 4 *in.*

369. Standing Bowl, ornamented round the body with foliaged scrolls, brilliantly enamelled, in various colours; above this is a marginal border of gilt imbrications, gems, and pearls; beneath are a red and a green fillet, a band of white outline ovals, and a central border like that encircling the margin. The stem is ornamented around its base. *Height* 5 *in.* *Diameter* 9 *in.* (Debruge and Soltykoff Collections.) *Coloured Plate* XVI. *Fig.* 2.

370. Large Standing Bowl, profusely ornamented with gilt scales each triply gemmed in the centre and edged with enamel pearls. *Height* $6\frac{1}{2}$ *in.* *Diameter* 10 *in.* *Fig.* 84. ("Manchester Art Treasures, Vitreous Art," *Plate* 1. *Fig.* 3.)

This piece formed the centre of a dessert service of Venetian glass belonging to, and used by, the late G. S. Nicholson, Esq., the whole of which has passed into this collection.

Fig. 84.

371. Large Low Tazza, centrally ornamented with a painted shield of arms, surmounted by a Doge's Cap; the arms are per fesse or and az. six roses counter-changed, being the coat of Leonardo Loredano, Doge of Venice, 1501—1521. From this device a series of curving short gilt ribs radiates surrounded by a dark transparent blue glass line; outside of this is a rich and elegant marginal border, composed of a wide band of gilt imbrications combined with enamel gems and pearls. *Diameter* $9\frac{1}{4}$ *in.* (Debruge and Soltykoff Colls.) *Coloured Plate* XIV. *Fig.* 1.

The margins of all the Tazzas described below as being ornamented with gilt imbrications, gems, and pearls, are of a similar character to the marginal decorations shown in this figure, but they are not all equally wide and rich.

372. Large Low Tazza, having the arms of Pope Leo X. (Giov. de Medici, A.D. 1513—1521), enamelled on the centre. A band of gilt imbrications, gems, and pearls, encircles the margin. *Diameter* $8\frac{1}{2}$ *in.* (Debruge Coll.)

373. Large Low Tazza, having an enamelled shield on the centre, bearing az. a cross between four birds or; looped around the shield is a thin yellow riband, and this is surrounded with a gilt and gemmed band. The margin is ornamented as the preceding. *Diameter* $9\frac{1}{2}$ *in.*

374. Large Low Tazza, enamelled on the centre, with a gemmed gilt oak-wreath surrounding a shield, bearing quarterly, 1 and 4 gu. a cross arg. 2 and 3 bendy of twelve or and gu.; radiating from the device is a series of short external ribs, above which are three gilt lines encircling the margin. On the foot, which is bell-shaped, between the initials M.C., is a smaller shield bearing az. (*should be gu.*) six human ribs (*coste*) arg., on a chief az. a lion passant or. *Diameter* $8\frac{3}{4}$ *in.*

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Of the two enamelled coats the larger one is that of Fabricio Caretto, Grand Master of the Order of St. John of Jerusalem from 1513 to 1521. The smaller coat is that of Muzio Costanzo, of Naples, Captain of the Italian Langue, and Admiral of the Order of St. John; he died in 1547, and the Tazza was no doubt made for him during the period of the Grand-Mastership of Fabricio Caretto.

375. Large Low Tazza, having enamelled on the centre the Lion of St. Mark, with a yellow body, and blue, green, and brown wing feathers; boldly raised spiral and gilt short ribs radiate from the device, surrounded by a handsome band of gilt imbrications, gems, and pearls, extending to the margin. *Diameter* 10 *in.*

376. Large Low Tazza, ornamented on the centre with the device of a man destroying a monster, probably Perseus, brilliantly enamelled in various colours: beyond this the surface is moulded in a honeycomb pattern, and surrounded by a band of gilt imbrications, gems, and pearls extending to the margin. This is a work of the fifteenth century. *Diameter* $9\frac{1}{8}$ *in.*

377. Large Low Tazza; on the centre is an enamelled medallion, containing a calf or fawn lying on bright green sward, with water in front; above the fawn the sun is represented pouring down a series of dotted rays. This is probably the impresa or device of some family. Radiating from the device are bold spiral gilt ribs encircled with a very wide marginal band of gilt imbrications, gems, and pearls. *Diameter* $10\frac{1}{2}$ *in.*

378. Large Low Tazza; having a white unicorn enamelled on the centre, enclosed within a shield-like rude scroll, surrounded by foliaged scrolls, bearing bright emerald green, blue, and yellow leaves, and encircled with a gemmed, pearled, and gilt band. A series of bold ribs radiate from the latter, beyond which is a marginal border of gilt imbrications, gems, and pearls. *Diameter* 10 *in.*

379. Large Low Tazza; having the bowl ornamented with a very bold moulded pattern resembling Gothic arches, formed of gilt intersecting curves radiating from a central circle, and enclosing groups of small bright blue and white enamel leaflets. A rich and wide band of gilt imbrications, gems, and pearls encircles the margin, surrounded by a dark transparent blue thin fillet. *Diameter* $10\frac{1}{2}$ *in.*

380. Large Low Tazza; having a raised gilt centre encircled with pearls and turquoises, and an outer circle, whence radiate a series of gilt ribs surrounded by two dark transparent blue fillets; beyond these is a rich and elegant band of gilt ovals, gems, and pearls; an outer transparent red fillet borders the margin. *Diameter* $10\frac{3}{4}$ *in.*

381. Large Low Tazza; having a deep bowl, ornamented on the centre with enamelled pearled loops, each enclosing an imitation gem; a series of short ribs radiate from this decoration, above which is a marginal band of gilt imbrications, gems, and pearls. *Diameter* $9\frac{3}{4}$ *in.*

382. Plate, ornamented with a wide gilt marginal border, figured somewhat like a richly-watered ribbon, gemmed and edged with pearls and turquoises. Enclosed within is a series of short gilt raised ribs radiating from a central circle. *Diameter* $9\frac{1}{4}$ *in.*

383. Plate, having a deep sunk centre, on which is enamelled a shield, bearing az. on a mound a tree ppr. and hanging from a gilt and gemmed border. The margin, which has a fluted rim, is broad and ornamented with a gilt scroll pattern of very delicate execution, formed by scratching away a portion of the gold. *Diameter* $6\frac{3}{4}$ *in.*

384. Deep Circular Dish, ornamented with a rich wide marginal border of gilt imbrications, gems, and pearls, beneath which is a series of boldly-raised external ribs, radiating from the centre. *Height* $3\frac{3}{8}$ *in.* *Diameter* $7\frac{1}{2}$ *in.*

Fig. 85.

385. Plate, of dark blue glass; having a deeply-sunk centre, ornamented in opaque white enamel, with the German Eagle surrounded by Arabesque marginal scrolls, etc., having red and green dots on the four circular devices. *Diameter* $7\frac{1}{4}$ *in.* *Fig.* 85.

386. Plate, of dark violet glass; like the preceding it is almost black in appearance and has a deep-sunk centre. It is ornamented in white enamel, with marginal scrolls, bearing conventional roses, anemones, and bells, which surround a vertical band of loops; on the centre is a star form. *Diameter* 7 *in.* *Fig.* 86.

387. Plate, of opaque white glass, painted in enamel, with a view of San Giorgio Maggiore, at Venice, in burnt sienna colour. *Diameter* 9 *in.*

388. Plate, of opaque white glass, painted in enamel, with a view of the Arsenal, at Venice, in burnt sienna colour. *Diameter* 9 *in.*

This and the preceding specimen formed part of a set that were formerly in the Strawberry Hill Collection, at the sale of which they were sold for ten shillings each to the late Mr. Bernal, at whose sale they realised £10 each.

389. Standing Tazza, resting on a fluted bulb and a columnar stem spreading out into a bell-foot. The bowl, which is nearly flat, is ornamented in enamel, with rudely-executed branches of rose-tree leaves, and stems bearing lilies of the valley and honeysuckle flowers; close to each of the last-named, a pair of doves are poised *vis a-vis*. On the centre are the letters I H S, and around the margin is enamelled scroll-work. The foot is decorated in the same style with five long serrated green leaves projecting downwards from the stem. *Height* 3 *in.* *Diameter* 8 *in.* *Coloured Plate* X. *Fig.* 1.

Fig. 86.

390. Tazza, of very beautiful form; in the centre of the bowl is an enamelled shield of arms in a lozenge—viz., quarterly 1 and 4, vert, a lion rampant or, 2 and 3 gu., three fleurs de lis arg., impaling az. three chevrons or—encircled with a gilt band of small oval medallions of flowers. The knop of the stem is pear-shaped (*see Fig.* 88) and composed of gilt lions' heads. A gilt fillet encircles the margin and another the foot. *Height* $6\frac{1}{8}$ *in.* *Diameter* $6\frac{1}{8}$ *in.* (Bernal Coll.) *Coloured Plate* XVIII. *Fig.* 1.

391. Enamelled Goblet; having a funnel-shaped body, ornamented on one side with a cavalier on a white war-horse, which is standing between two foliaged scrolls that extend around the glass to the opposite side, where they meet and almost surround a standing figure. The figures are habited in the costume of the latter part of the fifteenth century. The one on horseback has a red cap, blue vest with yellow margin, and red pantaloons, and is seated on a green saddle; in his left hand he holds an ensign, having a yellow ground and green and red streamer points. The other figure appears like a serving man, and is

clad in a red vest with blue puffings from half-way down, and emerald green pantaloons; in his right hand he holds a flagon, and in his left a long arrow. The scrolls and figures, etc., are coarsely but artistically executed in enamel, the character and colours of the former being similar to, though brighter, than the scroll-work in *Coloured Plate* XVI. *Fig.* 2. Beneath the feet of the figures is a brilliant green representation of grass, below which is a gilt fillet and a row of elongated drops, alternately red and blue. Surrounding the margin of the bowl is a band of gilt imbrications, with gemmed borders. *Height* $5\frac{1}{4}$ *in.* *Diameter* 4 *in.* *Fig.* 87.

Fig. 87.

392. Cylindrical Mug, of very dark purple glass, of a quaint form, tapering upwards slightly, and having a side handle. Around the margin is a row of imitation transparent pearls, of the size of small peas, projecting from a gilt band; beneath is a projecting ledge, attached to the top of the handle, below which are six entablatures with broad gilt frames, extending to the base, ornamented with similar pearls placed on the frames and on a set of gilt diamond forms which are enclosed within the entablatures. This decoration is relieved by opaque red lines

bordered with white dots in enamel, the general effect of the whole being strikingly peculiar and antique. *Height* $3\frac{3}{8}$ *in.* *Diameter* 3 *in.*

393. Cup and Saucer, of opaque white glass, ornamented in enamel, with crimson roses, green leaves, and dark blue harebells. The cup is bell-shaped, and sinks into a deeply socketed saucer, which has a slightly concaving rim surrounding its depressed centre or socket. *Height* $3\frac{1}{2}$ *in.*

From the similarity of this specimen to cups and saucers of Turkish origin, it is possible that this specimen may have been made for the oriental market, and the designs are not unlike those of Rhodian ware.

Fig. 88 (*No.* 390).

Fig. 89.

394. Tall Bottle, of a flattened pear-shape, with a long neck tapering from the body, and mounted with a silver rim, stopper, and foot. The body is ornamented with vertical stripes of opaque white, between which, reaching about half-way up from the base, are highly raised scrolls bearing leaflets in pink, red, yellow, blue, and light green colours, alternating with strings of green leaves, the whole of which are obviously fused to the surface. *Height* $10\frac{3}{4}$ *in.* (Bernal Coll.) *Fig.* 89.

395. Small Jug, with curved handle, of quaint form slightly concaving at the neck, from out of which a trough-shaped spout is pinched, and expanding downwards into a broad pear-shaped body resting on a transparent blue base rim. The mouth is ornamented with a yellow enamel fillet, and the body with fourteen vertical rows of oval bead-like spots of bright green enamel. *Height* $4\frac{3}{4}$ *in.*

396. Jug, having a spherical body, resting on a low bell-foot; a very broad concaving neck expands into a cup-shaped mouth with a slight spout, beneath which is a gilt fillet, and two neck-bands of gilt imbrications with central blue

dots and pearl borders. A similar circular band on the body surrounds an enamelled coat of arms quarterly per fesse indented or and gu.; a plain scroll handle extends from the shoulder to the upper part of the neck. *Height* 8 *in.*

397. Jug, very similar in form and decoration to the preceding, but having no spout, and the arms az., a fesse gu. between three leaves or. On the top and base of the shield are bright green foliage ornaments. *Height* 8 *in.*

Fig. 90.

398. Mounted Cup, ornamented, between yellow fillets, with a pair of white doves standing on a blue heart, and with other enamel devices. It is mounted with elegant silver filagree. *Height* $3\frac{1}{8}$ *in.* *Fig.* 90.

399. Mounted Cup, a companion to the preceding, ornamented with a bird, etc.

B. PAINTED AND GILT GLASS.

The specimens described under this head are decorated by paintings sometimes partially burnt in, but still not so much so as those already described, while others are evidently decorated with oil colours or gilding.

400. Small greenish blue Vase, having two gilt lions resting on its lip which serve for handles; and with flower and leaf sprays, rudely painted in gold, upon its body. *Extreme height* 4 *in.* *Diameter* $2\frac{7}{8}$ *in.* *Coloured Plate* XIX. *Fig.* 1.

401. Small greenish blue Vase, the companion to the preceding.

402. Spherical Vase, of opaque white glass, of the sixteenth century. The surface is ornamented with gilt scrolls and mermaids, rudely but artistically painted and slightly burnt in. There are gilt bosses on various parts, and it is supported on a bulb and foot, the latter being a restoration. *Height* $9\frac{3}{4}$ *in. Diameter* $6\frac{3}{4}$ *in.* (From the Collection of the Marchese d'Azeglio.) *Fig.* 91.

Fig. 91.

403. Painted Ewer, of colourless glass, in body form resembling *Fig.* 146. This peculiarly elegant specimen has a scroll handle and a curved spout, both sharply fluted; the handle is similar in form to that of *Fig.* 143, but is more elaborately curved. The mouth, rim, and fillets beneath, with the pear-shaped medallions of Satyr masks around the centre of the body, are of opaque white glass. The whole of the vessel is ornamented with gilt-work; this covers the handle, spout, and projecting bossed ribs which surround its lower end, and assumes the form of rude sprays, that spread over all other parts of the body, exactly like those in *Fig.* 1, *Coloured Plate* XIX. *Height* $7\frac{1}{8}$ *in.* (Sandes Coll.)

404. Shallow Bowl; this has an overhanging horizontal margin, ornamented with a series of linked black outlined ovals on a gilt ground, and having alternately a green and a crimson central spot, with the same coloured spots, one above and the other below each link. On the bottom of the bowl are four large oval medallions opposite each other; one pair is painted green, and the other contains black outlined diamonds, in rows alternately gilt and crimson coloured: surrounding the medallions are diamond etched circles, etc., and between them similarly etched scrolls, the whole being bordered on each side with etched circles, having elaborate Vandyked edgings. The gilt and colour work is painted on the external surface of the bowl, so as to show through. *Height* $1\frac{1}{4}$ *in.* *Diameter* $7\frac{3}{4}$ *in.*

This specimen bears a quaint and antique aspect, and resembles in its style and ornamentation a glass bowl preserved in Dr. Williams' Library, London, and stated to have belonged to Queen Elizabeth. See *Archæological Journal*, Vol. xxii., p. 166.

405. Large blue Bouquetière, having an oviform body and concaving neck expanding at the mouth, and encircled with a wavy fillet; three nearly vertical tubes rise, equi-distant, from the shoulder, and the whole rests on a compressed fluted bulb and a conical foot. The tubes are gilt, and the remains of elaborate gilt devices are perceptible round the whole of the body, combined with etched frames and scrolls of an elegant character. The form is similar to *Fig.* 157, without the handles. *Height* 8 *in.*

406. Small Painting, of the sixteenth century and of the Italian school. The subject is the Presentation in the Temple, a composition of about thirty minute figures, having faces very refined in execution and beautiful in expression. The whole is painted on the under side of a colourless glass tablet with black and gold material, the draperies being worked out with both, but their outlines are etched with a needle and the cavities filled in with a dark brown colour. *Height* $4\frac{1}{2}$ *in.* *Width* $3\frac{1}{4}$ *in.* (Uzielli Coll.)

407. Miniature Painting; a circular medallion of clear glass, having a convex upper surface ground into triangular facets, and a painted under surface on which is represented, in exceedingly beautiful and refined miniature work, the Adoration of the Shepherds. The colours are bright, and the draperies are heightened with gold; the composition is an artistic group of three figures backed with a quaint carefully-executed landscape, having a black sky, emerald green distance, and a red brick building facing the figures. The whole is set in gold. *Diameter* $1\frac{1}{4}$ *in.*

408. Miniature Painting, of the same size and workmanship as the preceding, representing the Offerings of the Magi, in a fine group of six figures, with a background of red buildings, etc.

C. CLEAR OR COLOURLESS GLASS.

The specimens described under this section are of plain uncoloured glass, of various tones, but occasionally having either gilt or coloured glass details.

Fig. 92.

Fig. 93.

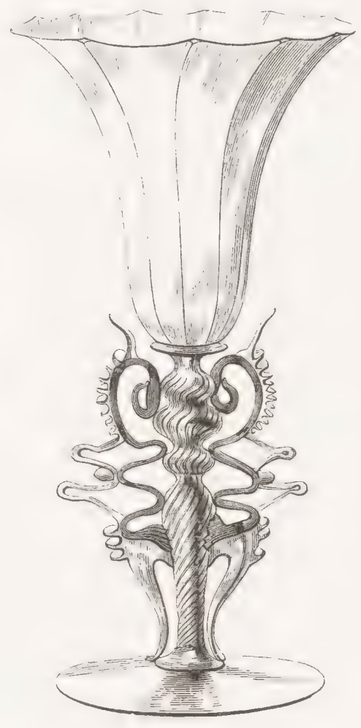


Fig. 94.

409. Tall Wine Glass; having a concaving funnel-shaped bowl, gracefully fluted so as to form twelve connected wavelets round the margin; the stem is of a ribbed baluster form, flanked with blue scroll wings edged with clear glass denticulations. *Height* $7\frac{1}{4}$ *in.* *Fig.* 92.

410. Tall Wine Glass; having an elongated funnel-shaped bowl, supported on a short stem composed of three scrolls ornamented with strawberry bosses. *Height* $10\frac{5}{8}$ *in.* *Fig.* 93.

411. Tall Wine Glass; having a bell-shaped bowl, fluted as above described (No. 409), and supported on a ribbed baluster stem elaborately ornamented with blue scroll wings edged with clear glass denticulations, zig-zags, etc. *Height* 7 *in.* *Fig.* 94.

412. Tall Wine Glass, having a small funnel-shaped bowl with a long, thin, columnar stem. *Height* $9\frac{3}{4}$ *in.*

413. Tall Wine Glass, a companion to the preceding.

414. Wine Glass; having a very elongated bell-shaped bowl (somewhat like Fig. 94, but plain), supported on a short fluted baluster stem to which are attached blue scrolls edged with clear glass denticulations. *Height* $5\frac{7}{8}$ *in.*

415. Wine Glass, similar to the preceding, but taller. *Height* $6\frac{1}{4}$ *in.*

416. Tall Wine Glass; having a bell-shaped bowl (somewhat similar to that of *Fig.* 101, but ribbed like that of *Fig.* 94 so as to form connected wavelets round the edge); the stem is of an elongated bulbous form. *Height* $6\frac{3}{8}$ *in.*

417. Wine Glass; having a ribbed funnel-shaped bowl, resting on a stem formed of a series of bulbs. *Height* $6\frac{1}{4}$ *in.* *Fig.* 95.

418. Small Wine Glass; having an oviform bowl, encircled with a raised thread and ornamented with bossed ribs; the stem is formed of three scrolls, each decorated with a blue strawberry boss. *Height* $4\frac{1}{2}$ *in.* *Fig.* 96.

419. Tall Wine Glass, having a funnel-shaped bowl ornamented with a raised thread and bossed ribs; the stem is formed of a series of fluted bulbs. This elegant specimen was bequeathed to Mr. Slade by the late Sir Charles Price, Bart. *Height* $5\frac{7}{8}$ *in.* *Fig.* 97.

420. Tall Wine Glass; having a bell-shaped bowl vertically ribbed, and elegantly ornamented with three blue pendant rings supported by loops; the stem is of a plain baluster form. *Height* $6\frac{1}{4}$ *in.* *Fig.* 98.

421. Tall Wine Glass; having a very graceful bowl, bell-shaped, rising from a bulbous base and vertically ribbed; the baluster stem is delicately fluted, and has blue wings with clear glass denticulations. *Height* $7\frac{1}{4}$ *in.* *Fig.* 99.

422. Hemispherical Wine Glass; supported on a bold baluster stem, with blue wings edged with clear glass circular denticulations. *Height* $4\frac{3}{4}$ *in.* *Fig.* 100.

423. Tall Wine Glass, having a broad bell-shaped bowl; blue scroll wings with clear glass zig-zags, etc., border the stem. *Height* $7\frac{1}{4}$ *in.* *Fig.* 101.

424. Tall Wine Glass, with a plain bowl (similar to that of *Fig.* 99, but bolder in form), resting on a stem composed of a series of bulbs diminishing in size downwards. *Height* $8\frac{1}{2}$ *in.*

425. Wine Glass; having a plain bowl (similar in form to that of *Fig.* 105, but broader mouthed and bolder) supported on a low stem somewhat like that of the same figure. *Height* $5\frac{1}{8}$ *in.*

426. Tall Wine Glass; having an elongated funnel-shaped bowl, concaving as in *Fig.* 105, and ornamented with two delicate scroll and chain handles on its lower half, as in *Fig.* 126; the stem is an elongated bulb. *Height* $6\frac{3}{4}$ *in.*

427. Wine Glass, with funnel-shaped bowl, ornamented as the preceding, and a plain bulb stem. *Height* 6 *in.*

428. Tall Wine Glass; with a bell-shaped bowl, ribbed as *Fig.* 94, and ornamented as the preceding but in blue glass; a ribbed long baluster stem supports it. *Height* $6\frac{1}{4}$ *in.*

429. Wine Glass; the bowl is oviform at its lower end, and expands upwards into a broad mouth compressed into four spout-like scallops alternating with four broad depressions. *Height* $5\frac{1}{2}$ *in.*

PLATE 5.

Fig. 96.

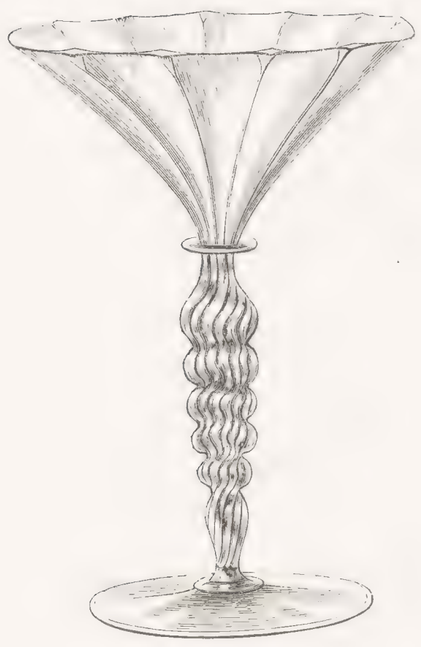


Fig. 95.

Fig. 98.

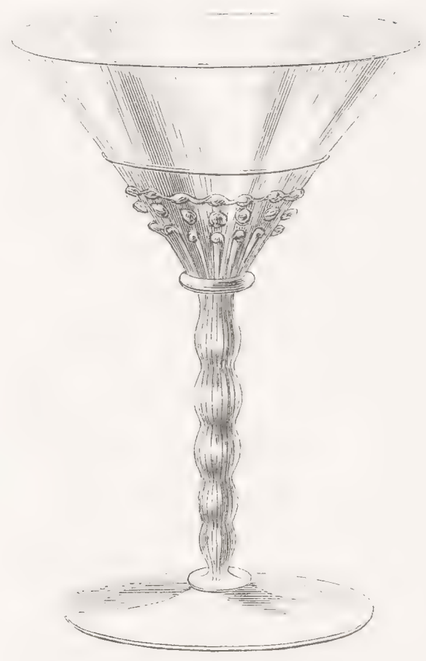


Fig. 97.

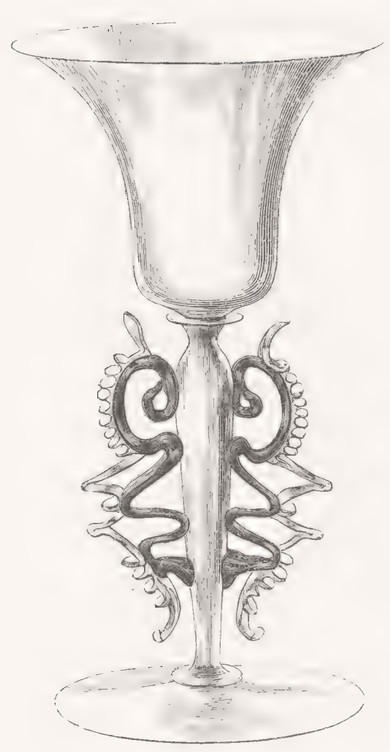


Fig. 94.

Fig. 100.

Fig. 101.

430. Wine Glass; having a bell-shaped bowl (similar to that of *Fig.* 101, but with a wide-spreading horizontal lip) and an elongated bulb stem. *Height* $5\frac{3}{4}$ *in.*

431. Tall Wine Glass, and companion; each has a graceful funnel-shaped bowl, expanding into a very broad mouth, and supported on a plain elongated bulb stem. *Height* 7 *in.*

432. Tazza Wine Glass; having a shallow cylindrical bowl with a widely expanding horizontal lip, supported on a very elegant spirally-ribbed baluster stem with denticulated wings. *Height* $5\frac{1}{4}$ *in.*

433. Puzzle Wine Glass; having a handsome hemispherical bowl, formed with a double casing so as to admit liquid between the two surfaces when poured in through a hole under the centre of the foot; the stem is cylindrical, and effectively decorated with three blue wavy fillets, between which runs a blue spiral thread; the rim of the foot is also blue. *Height* $6\frac{3}{4}$ *in.*

434. Wine Glass; the bowl is bell-shaped, and ornamented with a raised fillet, ribs, and three blue loops each supporting a blue ring. The stem is formed of an elongated bulb. *Height* $5\frac{7}{8}$ *in.* *Fig.* 102.

Fig. 102.

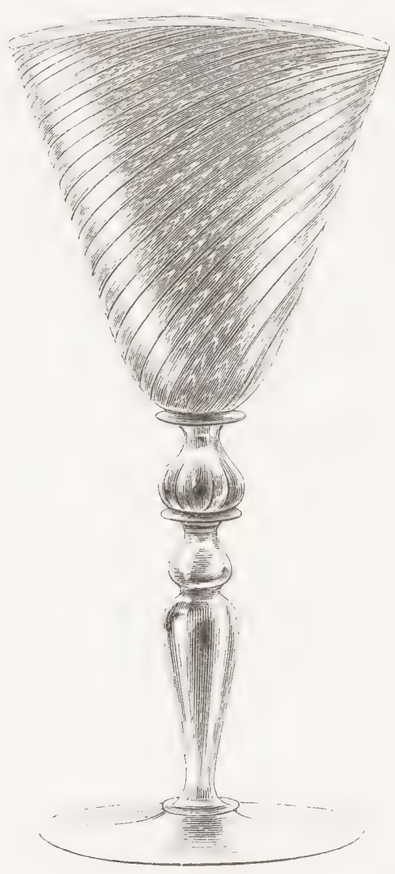


Fig. 103.

Fig. 104.

435. Tall Goblet; having a compressed or flattened bowl diagonally ribbed, supported on a plain baluster stem. *Height* $8\frac{7}{8}$ *in.* *Fig.* 103.

436. Tall Goblet; with bowl similar to the preceding, but supported on a twisted baluster stem. *Height* $8\frac{7}{8}$ *in.*

437. Wine Glass; having a bowl bell-shaped, but compressed downwards from the mouth so as to overlap the lower half about one-third of an inch all round; the stem is of a ribbed baluster form. *Height* $5\frac{3}{4}$ *in.* *Fig.* 104.

438. Wine Glass; the bowl is encircled with a raised fillet surmounting bossed ribs; the stem has blue scroll wings edged with clear glass denticulations. *Height* $5\frac{3}{8}$ *in.* *Fig.* 105.

Fig. 105.

Fig. 106.

Fig. 107.

439. Wine Glass; having a purple glass bowl ornamented with etched flowers; the wings on the stem have blue scrolls with colourless denticulations. *Height* $7\frac{1}{8}$ *in.* *Fig.* 106.

440. Wine Glass; the bowl is ornamented with an etched vine and grape border, and is supported on a delicately-ribbed elegant stem, of a convoluted cornucopia character, with denticulations on one side and a blue scroll on the other. *Height* $5\frac{5}{8}$ *in.* *Fig.* 107.

The etching on this glass was probably added in Flanders.

441. Scalloped Wine Glass, supported on a slightly ribbed bulbous stem. *Height* $5\frac{1}{2}$ *in.* *Fig.* 108.

442. Tazza Wine Glass; having a wide, expanding, shallow bowl supported on a bulb and baluster stem. *Height* $5\frac{7}{8}$ *in.* *Diameter* $5\frac{1}{8}$ *in.* *Fig.* 109.

443. Tall Wine Glass; having a finely formed scalloped bowl, funnel-shaped, with a gracefully undulating wide mouth; the stem is composed of a bulb and tapering column resting on a rising foot. *Height* $6\frac{1}{8}$ *in.* *Fig.* 110.

444. Large Tazza Wine Glass; having a boldly-scalloped bowl, with a deeply-sunk centre, supported on a ribbed stem. *Height* $6\frac{1}{2}$ *in.* *Diameter* $6\frac{3}{4}$ *in.* *Fig.* 111.

445. Large Wine Glass; having a funnel-shaped bowl, supported on a handsome baluster stem, surrounded at the summit with three blue scrolls, each decorated with two clear glass bosses. *Height* $7\frac{7}{8}$ *in.* *Fig.* 112.

446. Tall Wine Glass; having an oviform bowl, supported on an elongated bulb stem bordered with scrolls which terminate with circular denticulations. *Height* $6\frac{3}{8}$ *in.* *Fig.* 113.

447. Tall Goblet; having an oviform bowl, supported on a very handsome

PLATE I.

Fig. 108.

Fig. 109.

Fig. 110.

Fig. 111.

Fig. 112.

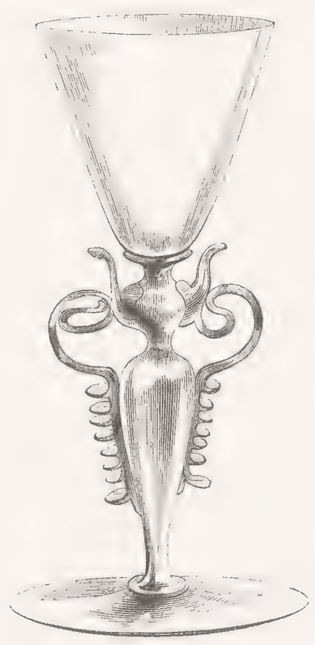


Fig. 113.

Fig. 114.

stem, composed of bulbs, etc., flanked with elaborate scroll wings which are edged with circular denticulations. *Height* $8\frac{7}{8}$ *in.* *Fig.* 114.

448. Tazza Wine Glass, having a graceful bowl similar to that of *Fig.* 110, but rounding off spherically; the stem is ribbed, and formed of a small bulb resting on an elongated one. *Height* $4\frac{1}{2}$ *in.* *Diameter* $5\frac{1}{2}$ *in.*

449. Tall Wine Glass; having a long funnel-shaped bowl, resting on a slender elongated bulb stem. *Height* $8\frac{1}{4}$ *in.*

450. Wine Glass; having an oviform bowl, supported on a twisted looped stem surmounted with a short horizontal bar terminating, at each end, with a gilt strawberry boss. *Height* $5\frac{3}{4}$ *in.* *Fig.* 115.

451. Tall Wine Glass; having a low oviform bowl, supported on a curious fluted baluster stem, ornamented at its summit with twelve small cross-hatched circular plates projecting vertically, and round its base with a series of white enamel pellets from which rise a set of ruby vertical denticulations. *Height* $7\frac{7}{8}$ *in.* *Fig.* 116.

452. Wine Glass; having a cylindrical bowl, supported on a gracefully convoluted stem formed of a series of delicately ribbed loops produced by twisting a heated rod of glass. *Height* $5\frac{3}{4}$ *in.* *Fig.* 117.

Fig. 115.

Fig. 116.

Fig. 117.

453. Wine Glass; having a graceful shallow bell-shaped bowl, with a blue ledge or projecting rim around its base, and supported on an elongated bulb stem. *Height* 5 *in.*

454. Etched Goblet; having an oviform bowl, decorated with diamond etched flowers, and supported on a bulbed stem having blue scroll wings with denticulations. *Height* $6\frac{7}{8}$ *in.* *Fig.* 118.

455. Tazza; having a broad shallow bowl, supported on a very handsome stem, formed of bulbs, with wings of zig-zags and scrolls partially denticulated. *Height* $6\frac{3}{8}$ *in.* *Diameter* $6\frac{5}{8}$ *in.* *Fig.* 119.

Fig. 118.

Fig. 119.

Fig. 120.

456. Etched Goblet; having an oviform bowl, ornamented with bossed projecting ribs, round its lower end, and diamond etched flowers above them; the handsome stem is composed of two bold tapering bulbs, etc., with scroll wings, denticulated; effectively dispersed about the ribs and stem are spots of bright blue glass. *Height* $7\frac{3}{8}$ *in.* *Fig.* 120.

457. Wine Glass; having a short, flat-based, bell-shaped bowl, supported on a ribbed stem with blue dragon wings between which are two blue pendant rings. *Height* $5\frac{1}{2}$ *in.* *Fig.* 121.

458. Large Wine Glass; having a funnel-shaped bowl, supported on a very quaint scroll stem, terminating at the summit with two chimera heads and bordered with cross-hatched circular plates, etc. *Height* $7\frac{1}{4}$ *in.* *Fig.* 122.

459. Wine Glass; having a scalloped bowl, supported on a ribbed stem with blue scroll wings edged with small denticulations. *Height* $\frac{5}{8}$ *in.* *Fig.* 123.

460. Tall Wine Glass; having a funnel-shaped bowl, resting on two scrolls which are supported on a ribbed stem composed of bulbs. *Height* $7\frac{3}{4}$ *in.* *Fig.* 124.

461. Tall Goblet; having an oviform bowl, supported on a curious stem the central portion of which represents an owl, with the wings, claws, eyes, ears, beak, and tail composed of blue glass. *Height* 10 *in.* *Fig.* 125.

462. Tall Wine Glass; having a bell-shaped bowl ornamented with scroll and chain wings and bossed ribs at the lower end, and supported on a ribbed bulb and baluster stem. *Height* 7 *in.* *Fig.* 126.

PLATE I.

Fig. 121.

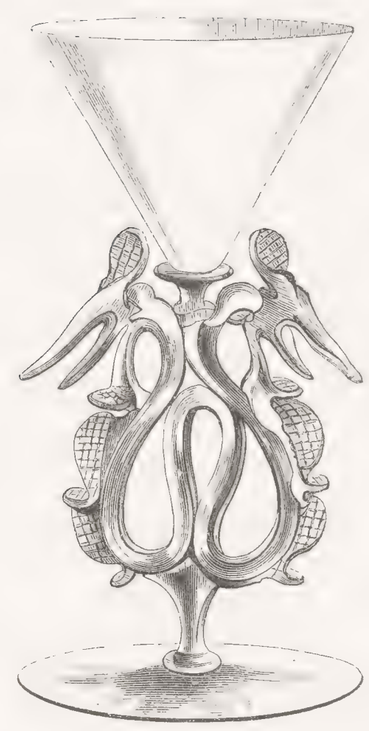


Fig. 122.

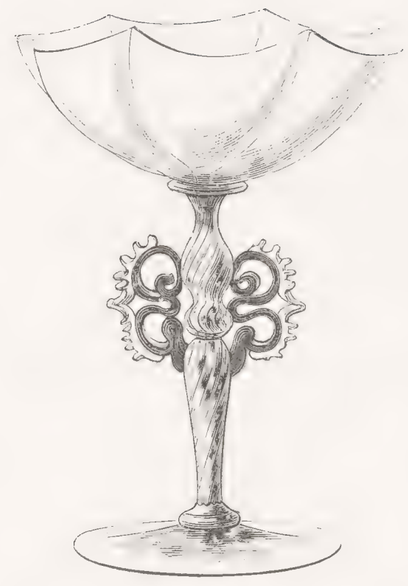


Fig. 123.

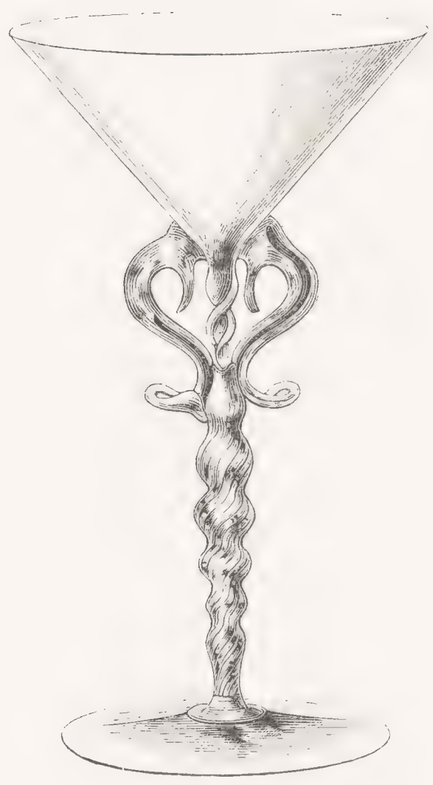


Fig. 124.

Fig. 125.

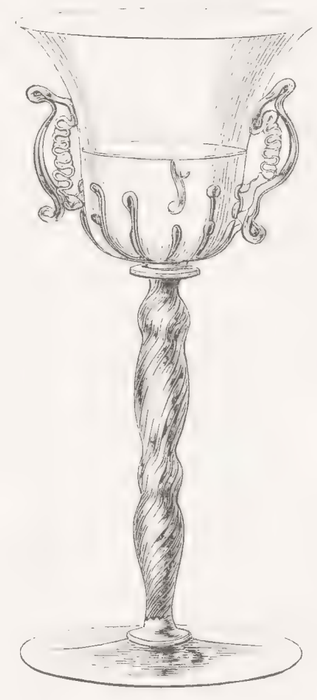


Fig. 126.

463. Tazza Wine Glass; having a broad shallow bowl, from the centre of which rises a crested bird in blue glass; the stem is of a plain baluster form. *Height* $4\frac{5}{8}$ *in.* *Diameter* 4 *in.* *Fig.* 127.

464. Tazza Wine Glass; having a very elegant expanding thistle-shaped bowl, octagonal and ornamented with bossed projecting ribs at the lower end; the bowl is supported on a graceful looped stem, ribbed and quaintly decorated round its summit with two blue tassel-like appendages. *Height* $4\frac{7}{8}$ *in.* *Diameter* $4\frac{5}{8}$ *in.* *Fig.* 128.

Fig. 127.

Fig. 128.

Fig. 129.

465. Tazza Wine Glass, amber toned; having a shallow bowl, the bottom of which is convex and channelled in lines radiating from the centre, which sink into deep marginal scallops producing a series of external bulbs. The stem is an elongated bulb. *Height* $4\frac{3}{4}$ *in.* *Diameter* $4\frac{1}{2}$ *in.* *Fig.* 129.

466. Tazza Wine Glass, a companion to the preceding.

467. Tazza; having a saucer-shaped bowl, ornamented with ribs radiating from the centre, similar to those in *Fig.* 129, so as to form angular pointed scallopings round the margin; the stem is formed of an elongated bulb. *Height* $4\frac{3}{4}$ *in.* *Diameter* $5\frac{3}{4}$ *in.*

468. Tazza, of amber hue; having a saucer-shaped bowl, supported on an elongated bulb stem vertically ribbed. *Height* $4\frac{1}{2}$ *in.* *Diameter* $5\frac{5}{8}$ *in.*

469. Tazza; having a saucer-shaped bowl, somewhat similar to the preceding, but with a higher margin; the stem is an elongated bulb. *Height* $5\frac{3}{8}$ *in.* *Diameter* 6 *in.*

470. Tazza; having a saucer-shaped bowl, sinking in steps, by means of four encircling depressions, which are intersected with ribbings radiating from the centre; the stem is of the baluster form, with bulbs at the upper end. *Height* $5\frac{1}{2}$ *in.* *Diameter* 7 *in.*

471. Tazza; having a bowl of a similar description to that of the preceding, but depressed into five steps intersected with ribbings; the stem is of a ribbed baluster form. *Height* $5\frac{1}{4}$ *in.* *Diameter* 6 *in.*

472. Tazza; having a deep bowl, scalloped into six bold compartments which form sharp angles at their points of junction, and encircled with two bold zig-zag fillets round the lower end; the stem is composed of a pressed or moulded boss. *Height* $4\frac{3}{4}$ *in.* *Diameter* $4\frac{3}{4}$ *in.* *Fig.* 130.

473. Tazza; having a saucer-shaped bowl, supported on a stem, once gilt, composed of lions' heads and pellets; a band, sprinkled with gold, encircles the margin of the bowl, and another the rim of the foot. *Height* $5\frac{3}{8}$ *in.* *Diameter* $5\frac{1}{2}$ *in.* *Fig.* 131.

474. Tazza; having a deep and elegantly shaped bowl, boldly scalloped into ten large embayments and encircled, round the lower half, with seven raised threads projecting like very narrow and thin ledges of clear glass; the stem is of a handsome form, composed of gilt and fluted bulbs, etc.; a band of sprinkled gold surrounds the margin of the bowl, and another the rim of the foot. *Height* $5\frac{3}{4}$ *in.* *Diameter* 7 *in.* *Fig.* 132.

475. Tazza; having a deep saucer-shaped bowl, ornamented round the lower half with a band of adjoining cut circles, and at the bottom with a circular ornament, consisting of four combined, heart-shaped, raised scrolls; the stem is composed of a fluted bulb and a handsome boss of lions' heads, etc., sprinkled with gold. *Height* 6 *in.* *Diameter* $6\frac{1}{2}$ *in.* *Fig.* 133.

476. Tazza; having a graceful saucer-shaped bowl, supported on a peculiarly elegant stem composed of three scroll brackets, each decorated with two gilt strawberry bosses having turquoise centres, beneath which is a handsome gilt boss of lions' heads and a small foot; encircling the latter and the bowl are bands sprinkled with gold. *Height* $6\frac{1}{4}$ *in.* *Diameter* $6\frac{1}{4}$ *in.* (Debruge and Soltykoff Collections). *Fig.* 134.

477. Goblet; having a long, concaving, funnel-shaped bowl, supported on a bulb enclosing a small die formed of white paste; the foot is conical. *Height* 7 *in.* Presented by A. W. Franks, Esq.

478. Goblet; having an elongated, oviform bowl, encircled at the lower end with a raised thread and a series of projecting bossed ribs; beneath is a fluted bulb, and a conical foot. *Height* $6\frac{1}{2}$ *in.*

479. Covered Goblet; having an elongated, oviform bowl, containing a ribbed, elongated blue bulb rising from the centre; the cover is conical, and surmounted with a knob; the stem is of a very bold baluster form. *Height* 12 *in.*

480. Goblet Vase; having a globular bowl with a low cylindrical neck, and supported on a long baluster stem edged with side scroll and chain wings like those shown in *Fig.* 126. *Height* $7\frac{1}{2}$ *in.*

481. Goblet; having a long, tapering, oviform bowl, supported on an elongated bulb stem. *Height* $5\frac{7}{8}$ *in.*

482. Cylindrical Goblet; supported on a short stem, having a moulded bulbous centre, and a conical foot ornamented with bold diamond mouldings, which were originally gilt. *Height* $9\frac{5}{8}$ *in.* *Fig.* 135.

PLATE c.

Fig. 180.

Fig. 181.

Fig. 182.

Fig. 183.

Fig. 184.

VENETIAN GLASS.

483. Large covered Vase, of amber toned glass. This fine vessel has two hollow handles, and these, with the cover, bulbs, and foot, are boldly ribbed; the rest of the body has diagonal flutings on which an effective series of arrowy forms seem to lie produced by refraction. *Height* $15\frac{3}{4}$ *in.* *Fig.* 136.

Fig. 135. *Fig.* 136. *Fig.* 137.

484. Cylindrical Goblet; rounding off at the base, and supported on a low, vertically-ribbed, baluster stem. *Height* $10\frac{1}{8}$ *in.* *Fig.* 137.

485. Tall Wine Glass; ornamented, on the bowl, with beautifully engraved birds, flowers, and insects; the fluted baluster stem has two singular scroll wings near the summit. *Height* $8\frac{1}{2}$ *in.* *Fig.* 138.

486. Very tall Wine Glass, with an exceedingly elaborate scroll stem, com-

posed of two thick rods of glass, intertwined, and running into the form of the figure 8, whence they curve upwards so as to terminate, after several involutions, in serpents' heads with bright blue crests. Each rod encloses two intertwined white threads. The foot is cased round the edge, and overlaid with elegant silver filigree, composed of scrolls, etc. *Height* $13\frac{1}{2}$ *in.* (Bernal Coll.) *Fig.* 139.

487. Tall Wine Glass; having a slightly concaving, funnel-shaped bowl, ornamented with projecting bossed ribs at its lower end, above which is a spiral thread running to within an inch of the margin. The stem is peculiar and composed of a pair of greenish blue scrolls, standing at right angles with a pair of clear glass scrolls; these support a bulbed rod, bordered with three equi-distant scrolls having strawberry bosses at their summits. *Height* $9\frac{1}{2}$ *in.* *Fig.* 140.

488. Covered Goblet Vase; having a ribbed cylindrical bowl, widening at its lower end, and recurving into a sharply-rounded base, supported on a long, thin, ribbed baluster and bulb stem. Attached to the sides are two small, pinched scroll handles. The cover is conical, and ribbed on the upper portion; surmounting it is a singular and effective ornament formed by vertically twisting a circular medallion, across which lies a belt of brilliant ruby glass; this medallion also has a bold denticulated edge running spirally, and is surmounted by a twist of another pattern. *Height* $12\frac{1}{2}$ *in.*

489. Goblet Vase; having a graceful bowl, inclining to the form of the lower half of the body of *Fig.* 136; against the neck rest two fluted scrolls, concaving inwards from the shoulder, and rising from handsome claws; the bowl is encircled with three mouldings, and is supported on a bold elongated boss formed of lions' heads, etc. *Height* $8\frac{1}{2}$ *in.*

490. Covered Goblet Vase; having a bowl, similar in form to the preceding, supported on a ribbed bulb; the cover has a blue knob. *Height* $3\frac{5}{8}$ *in.*

491. Tall Wine Glass; the graceful bowl of which is supported on a stem composed of a thick, spirally-ribbed, rod of glass forming the head and curved neck of a serpent terminating with an elaborately convoluted tail that rests on a small ribbed bulb and elegant foot. The serpent's head has a rich blue crest and blue eyes, and a stripe of the same blue is worked spirally through the whole of the body, producing a beautiful effect. *Height* $9\frac{3}{4}$ *in.* *See Plate, n.*

492. Goblet; cup-shaped to nearly one-third downwards, and then taking a cylindrical form slightly tapering to a flat base encircled with a crinkled frill. The lip is blue, and the margin is rudely inscribed, in two lines,—

MEMORARE NOVISSIMA TUA ET IN ÆTERNUM NON PECCABIS 1686:—P.N.A.S.N.

The whole of the surface beneath the inscription is beautifully decorated, in engraved work, with trailing branches of vine leaves and grapes intermingled with birds, cupids, and nude boys engaged in the various occupations of the vintage. Each of these figures has a curious shock head of hair and a quaint adult face. The whole decoration is graceful and masterly, but not deeply incised, and seems to have been executed by means of the lathe and acid combined. *Height* $7\frac{3}{4}$ *in.*

PLATE f.

Fig. 138.

Fig. 139.

Fig. 140.

VENETIAN GLASS.

493. Tall Wine Glass; having a cylindrical bowl, rounded at the base, supported on a stem, composed of fluted bulbs and a rod of twisted glass, from the summit of which projects a tulip formed of opaque red and white glass. *Height* $6\frac{3}{4}$ *in.* (Bernal Coll.) *Coloured Plate* XV. (*Frontispiece.*) *Fig.* 1.

494. Tall covered Goblet of very elegant form; it has a long tapering bowl, having the lower end surrounded by bossed projecting ribs, and the outline of the upper end continued by the dome part of the cover. Surrounding the cover are triply-bossed, raised gadroons; above these are two fluted bulbs supporting a highly-decorated, double-headed, crinkled, serpentine figure enclosing red and golden yellow filigree, and further ornamented with a crest and pair of wings made of opaque white glass, below which is a pair made of turquoise blue glass. The stem is formed of a similar serpentine figure, but with a dark blue crest and wings, and an elaborately convoluted tail resting on a fluted bulb and a plain foot. *Height* $18\frac{1}{2}$ *in.* (Bernal Coll.) *Coloured Plate* XV. (*Frontispiece.*) *Fig.* 2.

495. Large Goblet; having an elongated, oviform bowl, supported on a handsome stem, formed of two fluted bulbs; between the latter is a thick circle, formed of a spirally-crinkled glass rod enclosing red and golden-yellow spiral threads and edged with small denticulations; the circle surrounds a bunch of orange blossom composed of opaque white glass, the stalk and leaves being opaque green. *Height* $11\frac{1}{4}$ *in.* (Bernal Coll.) *Coloured Plate* XV. (*Frontispiece.*) *Fig.* 3.

Fig. 141.

496. Puzzle Wine Cup; with an oval quatrefoil bowl, encircled with raised blue threads; an upright tube rises from the centre, over which fits a moveable cylinder expanding at its summit into a bird-like form, of the crane character, with dark blue eyes, crest, wings, and tail. When the finger is placed over a

small aperture under the tail, the tube acts as a syphon, and the liquid issues from the beak. *Height* $7\frac{3}{4}$ *in.* (Debruge Coll.). *Fig.* 141.

497. Tumbler; with a flat base, and a cylindrical body to half-way up where it has a wrinkled band whence it expands into a wide cup-shaped mouth with a gilt rim. Around the lower half, arranged in three double columns, each containing a set of three, are bosses with large turquoise centres; and between the sets are three medallions of gilt satyric masks. *Height* $4\frac{1}{2}$ *in.*

498. Small Tumbler; cylindrical, encircled with a raised, crinkled, central belt; another surrounds the base, whence arise obliquely four wavy bands of crinkled glass, alternately blue and clear, and terminating, beneath the central belt, with scored leaf-like heads. *Height* $3\frac{3}{8}$ *in.*

499. Cup, of a handsome ogee form; the body rests on a large ring, and has, attached to its lower end, crested and denticulated scroll handles, between which are medallions with strawberry bosses and large pellets. *Height* $2\frac{5}{8}$ *in.*

500. Cup; having the bulbous, or lower part, much more compressed, and the upper part much more elongated than the preceding; it rests on a low bell-shaped stem, and has two crested and denticulated scroll handles projecting from the sides. *Height* $3\frac{5}{4}$ *in.*

501. Cup, a companion to the preceding.

502. Cup, inclining to the form of the last named, but rounder at the base; the body is ornamented with bold projecting ribs, and is supported on a low, bell-shaped stem encircled with two blue fillets; above the ribs are two pear-shaped medallions of lions' heads, with intermediate strawberry bosses, connected together by two encircling fillets, above which is a blue fillet. *Height* $3\frac{1}{4}$ *in.*

503. Cup; tapering slightly downwards to an expanding base; a long spout rises from near the base, parallel with the body, and curves outwards just above the mouth; two curved side handles flank it, one on each side. *Height* 4 *in.*

504. Ship Vase, or Cup; having an oval-shaped body, gracefully compressed inwards towards the margin, and supported on a compressed ribbed bulb, resting on a high conical foot. This fine vessel has a ribbed spout with a blue rim, like that of *Fig.* 145, at one end of the oval; at the other end is a denticulated *S*-shaped scroll handle, surmounted with a knob. Half-way along the lip on each side of the body, from the handle, proceeds vertically a high, colourless, zig-zag, surmounted with a blue zig-zag; another colourless one follows, bearing four rods which bend over at their summits, so as to meet in a point and support a compressed ribbed bulb, a knob, and a species of pennant of hatched blue glass; the whole mass of zig-zags, etc., form the strands of the ship and an elegant tent-shaped ornament. The spout end has a colourless and blue zig-zag border, extending about an inch along each side. The lower part of the body is encircled with six raised threads, bearing, on each side of the vessel, a central gilt medallion which contains a projecting lion's head and lies between two blue bosses. *Height* $13\frac{1}{2}$ *in.; height of body and stem* $6\frac{1}{4}$ *in.; length of body, from handle to spout inclusive,* $8\frac{3}{8}$ *in.* (Sandes Coll.)

505. Ewer; having a body of the form of an inverted pear, with a long neck and trefoil scalloped mouth, and supported on a bulb and conical foot. It has a fine denticulated scroll handle, and the whole of the vessel is boldly ribbed. *Height* 9½ *in.* *Fig.* 142.

Fig. 142.

Fig. 143.

506. Large Ewer; remarkable for elegance of form, and perfection of workmanship. It has an oviform body, a gracefully curving neck encircled with a zig-zag fillet and expanding into a trefoil scalloped mouth; above the latter rises a fine denticulated scroll handle, which descends parallel with the neck and then re-curves on to the shoulder, where it terminates in a handsome shell form ornamented with a medallion bearing a satyr's head. Supporting the body is a ribbed, flattened bulb, and a conical foot. *Height* 12 *in.* *Fig.* 143.

507. Large Ewer, similar in form to *Fig.* 143, but having a shorter neck and larger body; at the bottom of the handle is a strawberry boss. *Height* 13 *in.*

508. Large Ewer; having a body less tapering, the shoulder flatter, and the trefoil mouth more expanding than in *Fig.* 143, and supported on a foot like an inverted bowl. The handle is similar to that of *Fig.* 143, but it is bordered

with a thick, twisted, and pinched edging, of a chain pattern, from which five circular denticulations project; at its base is a lion's head on a pear-shaped medallion. *Height* 13 *in.*

509. Large Spouted Ewer; having a body of a fine pyriform character, with a gracefully re-curving neck and expanding mouth, supported on a compressed ribbed bulb and bell-shaped foot. A zig-zag fillet encircles the centre of the neck, whence a bold, pinched, scroll handle starts rising upwards and then descending to the shoulder, where it terminates with a handsome satyric mask. On the opposite side is a curving ribbed spout, and the body is elegantly ornamented with diamond etched scrolls. *Height* $9\frac{1}{4}$ *in.* *Fig.* 144.

Fig. 144.

510. Ewer; having a conical foot, expanding from its apex into a bold balloon-shaped body, above which is a much smaller globular form, bearing a cylindrical neck, whence a slender scroll handle projects to the shoulder of the body. This vessel is so remarkably light that it hardly seems able to bear the weight of liquid required to fill it; and the handle appears to be too slight to sustain the body, yet it is so well placed that all danger of fracture is prevented when the vessel is raised by its means. *Height* $9\frac{1}{4}$ *in.*

511. Biberon; in form very similar to that of *Fig.* 145, but having a bolder pear-shaped body, and a base which turns inwards into a cone; the neck is encircled with a fillet, to which is attached a dark blue scroll handle terminating in a large shell form; the spout is straighter than that of *Fig.* 145. *Height* $4\frac{3}{4}$ *in.*

512. Small Ewer, or Burette; having a pyriform body, surrounded at the base by projecting ribs, and surmounted with a funnel-shaped neck and mouth; round the neck is a wavy fillet, to which is attached a very elegant denticulated scroll handle terminating in a shell form. The spout is ornamented at the base with a pear-shaped gilt medallion bearing a lion's head. Between the handle and the spout, on each side, is a similar medallion, attached to four encircling raised threads bearing large blue pellets, one on each side of the medallion. The rim of the spout is blue, and two blue fillets encircle the mouth and thick part of the neck of the vessel. *Height* $3\frac{1}{4}$ *in.* *Fig.* 145.

Fig. 145.

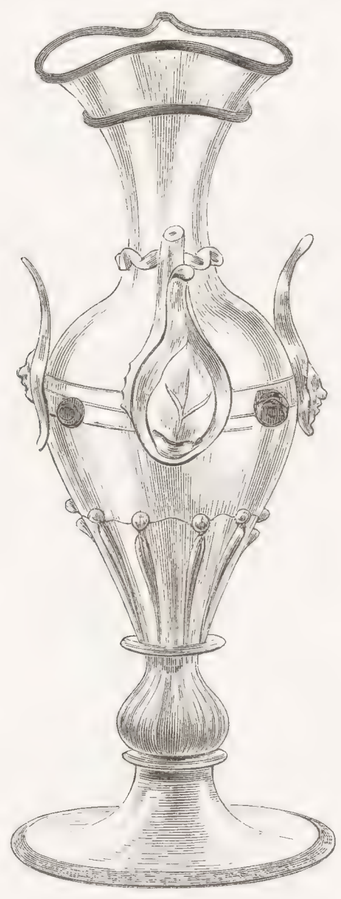


Fig. 146.

Fig. 147.

513. Small Ewer with spout; having a balloon-shaped body, a funnel-shaped neck, and trefoil scalloped mouth; only the remains of its handle and spout are visible. *Height* $6\frac{5}{8}$ *in.* *Fig.* 146.

514. Small Ewer, or Burette, with an oviform body, a funnel-shaped neck, and compressed trefoil mouth; the base is surrounded by bossed projecting ribs. A ribbed scroll handle projects above the mouth; opposite is a curved, ribbed, blue spout; a blue wavy fillet encircles the neck, and a clear glass thread runs round the shoulder. *Height* $5\frac{1}{8}$ *in.* *Fig.* 147.

515. Small Ewer, or Burette; similar in form to the preceding, but with only the handle blue, and no bosses on the base ribs. *Height* $5\frac{1}{8}$ *in.*

516. Bouquetier; having two central compressed bulbs, each encircled with a dark blue wavy fillet; above them is a funnel-shaped bowl, with a wide expanding, horizontal lip, and below is an amber-coloured baluster stem. *Height* 7 *in.* *Fig.* 148.

517. Bouquetier, of a curious *chimera* character. The body is moulded like a bunch of grapes, and has blue wings, and a blue rimmed orifice projecting from the shoulder; from the latter rises a slender cylindrical neck surmounted with a head, somewhat like a duck's with the bill raised vertically, and having blue eyes and a blue crest; the whole rests on a ribbed bulb and a slightly conical foot. *Height* 8 *in.* (Debruge Coll.) *Fig.* 149.

518. Tall Bouquetier; having a body of a compressed bulbous form; tapering gracefully therefrom is a long cylindrical neck with an expanding mouth, and encircling wavy fillet; two delicate, light blue, scroll and chain-like handles are situated beneath. *Height* $8\frac{3}{4}$ *in.* *Fig.* 150.

519. Curious Bouquetier, having a slender ribbed baluster stem, supporting a spherical bulb out of which four curving tubes rise, in opposite directions, surmounted with a boat-shaped mouth having an undulating lip edged with blue *Height* $8\frac{1}{2}$ *in.* *Fig.* 151.

520. Tall Bouquetier, of elegant form; it is supported on a stem composed of two bulbs, etc., connected by denticulated wings having blue scrolls; above is a graceful large bulb form, flattened at the shoulder, and supporting a bold neck, surrounded with a wavy fillet, whence a beautiful convolvulus-shaped large bowl rises, having an undulating mouth ornamented with a gradated series of delicate encircling ribbings, increasing in width apart downwards and finally becoming vertical along the neck. *Height* 10 *in.* *Fig.* 152.

521. Tall Bouquetier, of elegant form; having a handsome, long, and slender ribbed baluster stem supporting a ribbed spherical bulb, whence rises a rather smaller bulb on which rests a wide, expanding, low, bell-shaped bowl with a nearly pointed base; two beautiful chain-like handles connect the bulbs. *Height* $8\frac{1}{2}$ *in.* (Earl of Cadogan's Coll.) *Fig.* 153.

522. Fanciful Bouquetier, something like a headless giraffe, standing on a globe resting on a pinched base-rim; the vessel has a nearly vertical pear-shaped mouth which overhangs slightly. The legs are connected together by a film of clear glass, and the body is ribbed down to them. *Height* 11 *in.* *Fig.* 154.

523. Tall Bouquetier, having a graceful elongated body, formed like a tapering float, pinched into a series of bulbous compartments of which the central one is the largest; blue scroll wings, having clear glass denticulations and pendants, are attached to the centre; the mouth is pear-shaped and slightly overhangs. The stem is of a short fluted baluster form; and the body is vertically ribbed so as to form a series of facets, the outlines of which have a beautiful wavy effect. *Height* 13 *in.* *Fig.* 155.

524. Tall Bouquetier, having a flattened spherical body, with a long slender neck triply bulbed at the top, and curving into a handsome pear-shaped vertical

Fig. 148.

Fig. 149.

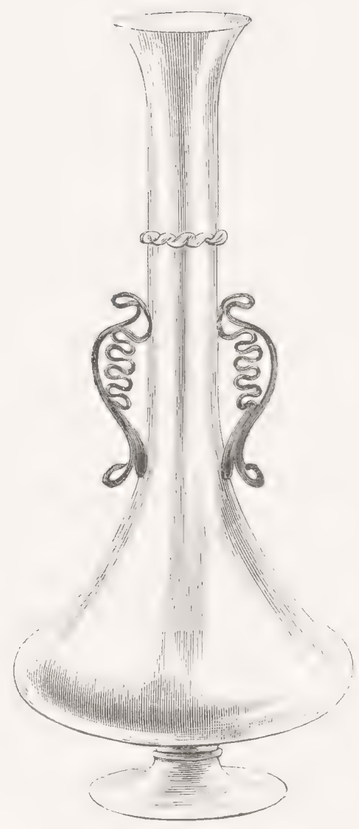


Fig. 150.

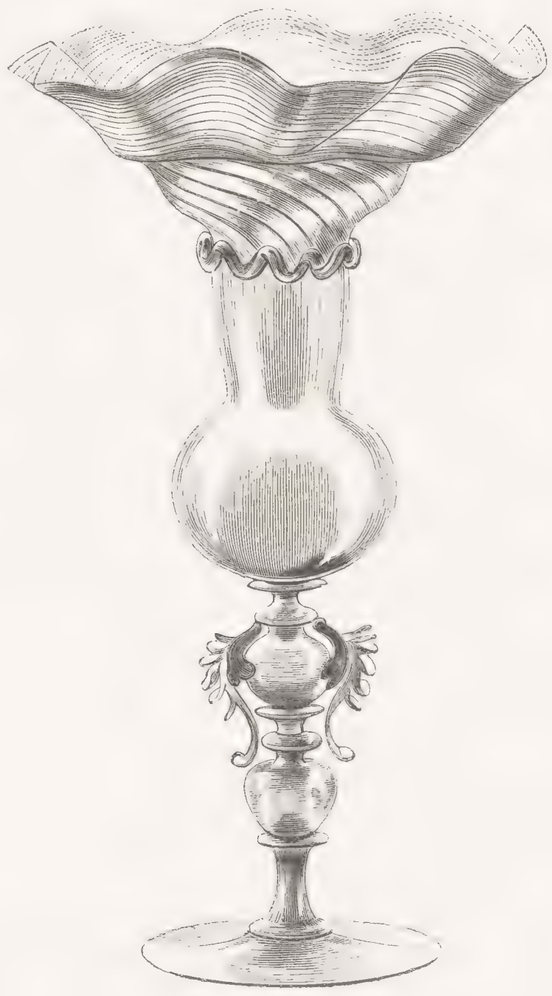


Fig. 152.

Fig. 151.

Fig. 153.

VENETIAN GLASS.

mouth rimmed with blue; blue threads ornament the mouth, these intersect a diagonally ribbed surface which extends throughout the whole of the body; the stem is composed of a compressed ribbed bulb, resting on a low conical foot. *Height* $10\frac{3}{4}$ *in.* *Fig.* 156.

Fig. 154. *Fig.* 155. *Fig.* 156.

525. Fanciful Bouquetier, of slightly enfumé glass, and elegant *chimera* character. It has a head like that of *Fig.* 149, backed with a compressed vertical hood, supported by a flat crinkled stem rising from the shoulder. The neck is bulbed; the body has a dome top merging into a compressed bulb re-curving into an oviform bulb, and has handles, as in *Fig.* 150, but terminating with white enamel strawberry bosses; the stem and foot are as in *Fig.* 149. The eyes are blue, the crest is white enamel, and the shoulder orifice blue rimmed and more tubular than in *Fig.* 149. *Height* $11\frac{5}{8}$ *in.*

526. Bouquetier; with a wide mouth, similar to that of *Fig.* 152, and encircled with blue raised threads. *Height* $6\frac{1}{2}$ *in.*

527. Bouquetier; it has a flat foot, and small bulb, supporting a globular form with handles, and merging into a large funnel form, the mouth of which is encircled with spiral purple threads. *Height* $5\frac{5}{8}$ *in.*

528. Bouquetier; with a body having a compressed bulbous base merging into a long conical neck, which expands into a funnel-shaped mouth. Round the neck is an opaque white wavy fillet, and a blue spiral line encircles the bulbous part of the vessel. *Height* $5\frac{7}{8}$ *in.*

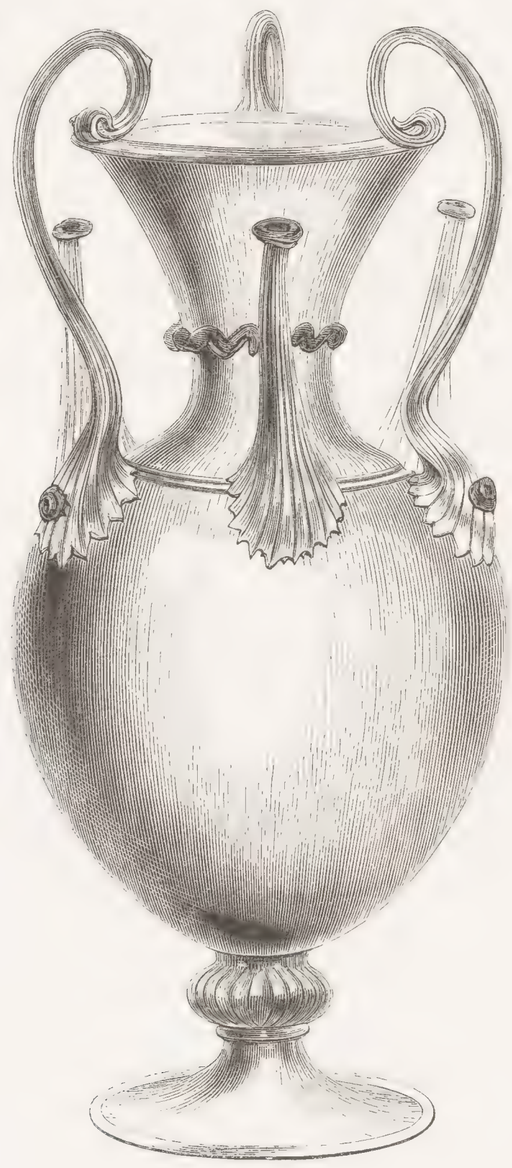


Fig. 157.

529. Large Bouquetier, or Vase, a remarkably fine example of form. It has three elegant, ribbed, scroll handles terminating in shell-like ornaments; between these handles, rising nearly vertically, are intermediate ribbed spouts with shell-like bases and blue rims. The neck is encircled with a wavy fillet and the shoulder with a narrow moulding. *Height* 11 *in.* (Bernal Coll.) *Fig.* 157.

530. Large Vase, of very elegant form, somewhat similar to that of *Fig.* 157, but without the spouts and having the neck and mouth larger in proportion to the body. The lower end of the body is ornamented to about one-third upwards with a series of projecting bossed ribs; a blue zig-zag fillet encircles the bottom of the neck; and two fine, ribbed, scroll handles, like those in *Fig.* 157, but

bolder, spring from two large medallions of lions' heads attached to the shoulder, and extend upwards to slightly above the mouth. *Height* 12½ *in.*

531. Companion Vase to the preceding, and, like it, exceedingly light.

532. Covered Cup; having a cylindrical bowl, slightly tapering downwards, surmounted with a ribbed, low, dome cover supporting a ribbed blue bulb, sprinkled with gold, and a cross tipped with blue; the body rests on a bulb stem and a bell foot, both of which are ribbed, blue, and sprinkled with gold. *Height* 11¾ *in.*

533. Barrel-shaped Vase, with two blue scroll and chain handles (similar to those in *Fig.* 126), and a blue re-curving foot. *Height* 4½ *in.*

534. Small Vase, having a balloon-shaped body, and a cylindrical neck ribbed and encircled with a blue wavy fillet attached to two blue scroll handles; a blue rim surrounds the base. *Height* 4¾ *in.*

535. Small Bucket, with an overhanging twisted handle working in two sockets; it is ornamented with etched devices, four bosses of lions' heads, and raised belts. *Height* 4 *in.* *Diameter* 5¼ *in.* *Fig.* 158.

Fig. 158.

536. Flacon or Bottle, having a cylindrical body, and a very short funnel-shaped neck encircled with a wavy fillet; six equi-distant projecting vertical bands of wavy glass with circular denticulations, alternately blue and clear, extend from the shoulder to the base of the body. *Height* 7 *in.*

537. Flacon or Bottle, a companion to the preceding.

538. Costril or Flask, having a flat circular body curving round into a pointed base, and edged with a blue glass fringe. *Length* 8½ *in.* *Diameter* 5½ *in.*

539. Smelling Bottle, in the form of a wheel, with raised ribs radiating from a central strawberry boss; it is edged with similar bosses, alternately blue and clear glass, and it has a very small neck. *Diameter* 3¼ *in.*

540. Small Cup, of very thin and light old glass, of an elegant boat-shape and vertically ribbed. It has a handsome fluted spout, two bright blue scroll side handles, and is decorated with eight amber threads encircling its concaving margin. *Height* $2\frac{1}{2}$ *in.*

541. Low Tazza, embayed into eight compartments of an angular form; it has two denticulated scroll handles; a large ribbed ball of bright blue glass projects from the centre, and the vessel rests on a low bell-foot. *Height* $2\frac{1}{8}$ *in.* *Diameter* $6\frac{1}{4}$ *in.*

542. Low Tazza, similar to the preceding, excepting that the margin of the bowl is of blue glass to the depth of an inch. *Height* $2\frac{1}{2}$ *in.* *Diameter* $6\frac{1}{2}$ *in.*

543. Large Tazza, nearly flat, and resting on a low bell-foot; a wreath of etched flowers encircles two raised chain bands having between them a bolder one of blue glass. *Height* 3 *in.* *Diameter* $10\frac{5}{8}$ *in.* *Fig.* 159.

Fig. 159.

544. Large Tazza, a companion to the preceding.

545. Plate, having a turned over edge and a broad margin, ornamented with an etched border of roses and other flowers surrounding a slightly sunk centre. *Diameter* $8\frac{1}{5}$ *in.*

546. Small deep Dish, with a broad rim; in the centre is engraved a circle of radiating ovals, and on the rim is a handsome running scroll with a ribbon above and a narrow wreath below. *Height* $1\frac{3}{4}$ *in.* *Diameter* 8 *in.*

547. Circular pane of window glass; it has a turned over edge, and at the centre a small punt mark. Presented by Charles Winston, Esq. *Diameter* $4\frac{3}{4}$ *in.*

548. Similar pane of window glass of a larger size. From an old building near St. Marks at Venice. Presented by A. W. Franks, Esq. *Diameter* 6 *in.*

This and the last specimen were known as *rulli*, and are from windows such as are represented in the engravings of the 16th century; these *rulli* were divided into *comuni* and *treperpè*, according to their size.

549. Spoon; having a twisted handle with a boss at each end, as well as in the centre. *Length* $7\frac{3}{8}$ *in.*

550. Spoon; varying slightly from the preceding in the form of the bosses and the bowl. *Length* $7\frac{3}{8}$ *in.*

551. Fork; having a twisted handle with bosses at each end, and three straight prongs. *Length* $7\frac{3}{8}$ *in.*

552. Glass Knife; having a very bold twisted handle, enclosing thick blue, red, and yellow, intertwined spiral threads, and attached to a long thick blade; a gilt strawberry and two smaller bosses ornament the handle. *Length* $10\frac{3}{4}$ *in.* (Debruge Coll.)

553. Glass Bell; ornamented on the shoulder with three large raised gilt satyric masks, between which are turquoise bosses, and beneath are three raised gilt belts; the handle has four projecting scrolls, and the clapper is of dark blue glass. *Height* 7 *in.* (Debruge Coll.) *Fig.* 160.

Fig. 161.

Fig. 160.

Fig. 162.

554. Pair of Candlesticks, with elegant stems; each is constructed of two twisted rods of glass intertwined so as to form three large loops, whence project, from the back and front, three large zig-zags having circular, horizontal, scored denticulations; similar denticulations run down the sides of the loops to the foot, which is slightly conical and terraced; the nozzle is cylindrical. The stem loops enclose a bright ruby thread. *Height* $8\frac{1}{2}$ *in.*

555. Pair of Candlesticks, each having a diagonally ribbed stem, with a small bulb at the base and two larger ones above it, all encircled with wavy bands of ruby glass; the lip of the socket has a scored twisted border. The foot is bell-shaped, and ornamented with rows of large diamond-shaped indentations, and a dark blue rim. *Height* $6\frac{3}{4}$ *in.*

556. Tall Wine Glass; having an oviform bowl, with a surface ornamented with rows of pear-shaped bosses; the stem is surmounted with two loops, each holding a blue ring, and is flanked with wings terminating with serrated pendants. *Height* $6\frac{3}{4}$ *in.* *Fig.* 161.

557. Tall Wine Glass; having a tapering bowl supported on a stem composed of three short rods and two intermediate ribbed bulbs; the surface is ornamented with hexagonal flat facets. *Height* $6\frac{1}{2}$ *in.* *Fig.* 162.

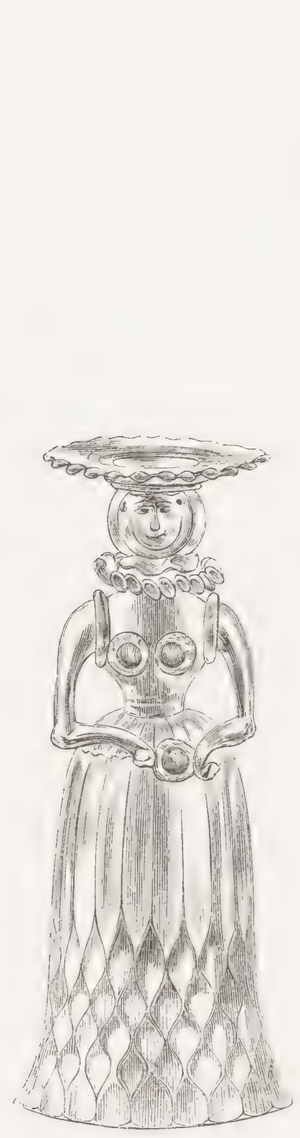


Fig. 163.

Fig. 164.

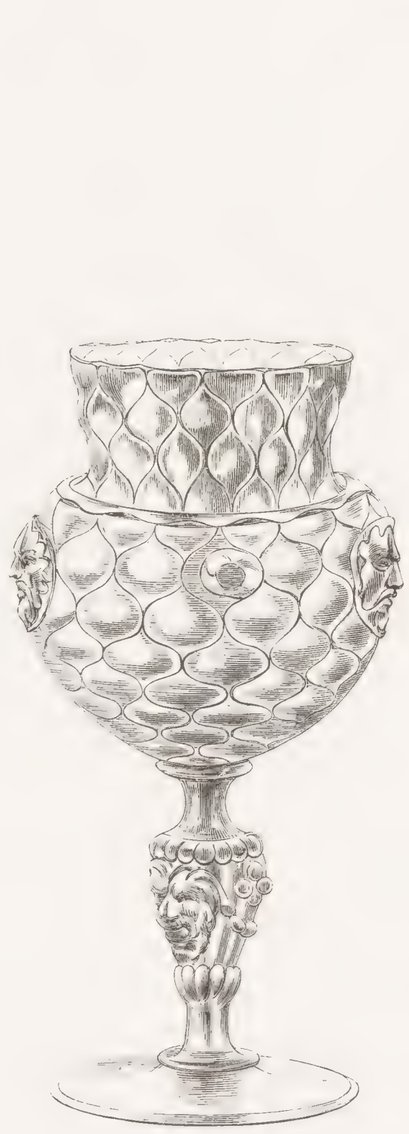


Fig. 165.

558. Wine Glass, with a graceful funnel-shaped bowl diagonally fluted; the stem is like that of *Fig.* 161, but it has no rings and the wings are of green glass. *Height* $5\frac{7}{8}$ *in.*

559. Curious Goblet; of brownish smoky glass. When inverted (as shown in the illustration) this vessel takes the form of a lady habited in the costume of the early part of the seventeenth century. The face is gilt; round the neck

is a denticulated frill; the breasts are marked with large turquoise bosses, and the hands support another large turquoise; along the dress are vertical ribbings which merge at the lower end into rows of hexagonal mouldings with flat facets. *Height* $7\frac{1}{4}$ *in.* *Fig.* 163. (Bernal Coll.)

560. Covered Cup; having a funnel-shaped body resting on a ribbed bulb powdered with gold; the cover is depressed, and rises into a bulbed vertical knob. The surface of the body and cover are ornamented with rows of pear-shaped depressions running diagonally. *Height* $12\frac{1}{8}$ *in.* *Fig.* 164.

561. Goblet Vase; having a thistle-shaped bowl ornamented on the bulb with three medallions of gilt satyric heads, between which are turquoise bosses; the stem is formed of a large tapering boss composed of gilt lions' heads. The surface of the bowl is moulded like that of the preceding. *Height* $8\frac{1}{2}$ *in.* *Fig.* 165.

562. Hemispherical Wine Glass; supported on a greenish blue baluster stem, and having the bowl ornamented with adjoining rows of hexagonal mouldings with flat facets. *Height* $4\frac{1}{4}$ *in.*

563. Tazza Wine Glass; having a very shallow funnel-shaped bowl with a bossed surface like the preceding; a small blue frill surrounds the base of the bowl, and surmounts an elegant stem formed of a series of fluted bulbs. *Height* $5\frac{3}{4}$ *in.*

564. Bowl; of ogee form, having denticulated scroll handles attached to the globular part of the body, and a dark green fluted ball rising from the centre of the interior; the surface is ornamented like that of the preceding. *Height* $3\frac{1}{2}$ *in.* *Diameter* $4\frac{1}{2}$ *in.*

565. Bowl; slightly curving over at its mouth, and having two pinched scroll side handles; the lower part of the bowl has pear-shaped bosses in relief; the upper portion has slight diagonal flutings, and is ornamented with a series of light blue encircling lines producing a very elegant effect. *Height* $2\frac{1}{2}$ *in.* *Diameter* $4\frac{7}{8}$ *in.*

566. Bowl; rather more bell-shaped than the preceding, but similar to it in the handles and the lower part of the bowl; the upper part is plain, but has a blue fillet above and below it. *Height* $2\frac{1}{2}$ *in.* *Diameter* $4\frac{5}{8}$ *in.*

567. Bowl; in form like No. 565, but having blue handles; plain amber threads encircle the margin, beneath which are embossed four bands of fret-work alternating with bands of vertical ribs. *Height* $2\frac{1}{2}$ *in.* *Diameter* $4\frac{7}{8}$ *in.*

568. Vase, of a bold handsome form; having a concaving neck divided into eight facets, and a bulbous body pressed out into eight large embayments, below which is a low bell-foot. A plain fillet of bright blue glass encircles the lip; and a wavy fillet of the same material surrounds the neck, to which are attached two ribbed scroll handles, terminating on the shoulder in shell-like forms. The body and neck are ornamented with graceful large lattice work, quaint in appearance, formed by the intersection of wavy diagonal lines of opaque white, and slightly raised from having been laid on the surface after the vessel was shaped. *Height* $6\frac{3}{4}$ *in.*

569. Covered Tall Goblet, cylindrical, with an expanding base; it is covered with a large diamond pattern, formed by the intersection of raised diagonal white stripes laid on to the surface as above described. *Height* $12\frac{1}{2}$ *in.*

570. Tazza; having a shallow bowl resting on a bulb and bell-foot; it is covered with a diamond pattern, laid on the surface, and formed of raised white stripes radiating from the centre, one set being bolder than the other. *Height* $3\frac{1}{2}$ *in.* *Diameter* $6\frac{1}{4}$ *in.*

In the following glasses the stems are formed of rods of clear glass enclosing spiral ornaments usually diversified by threads of latticinio or milky white glass. When two or more threads are combined they generally intertwine in reverse directions.

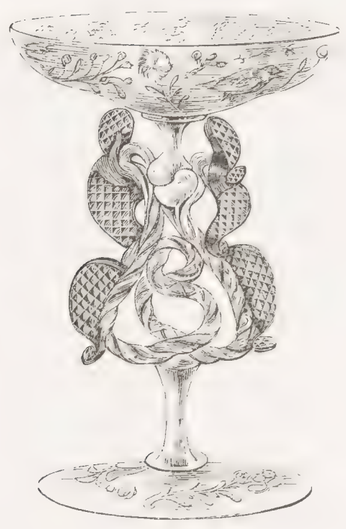


Fig. 166.

Fig. 167.

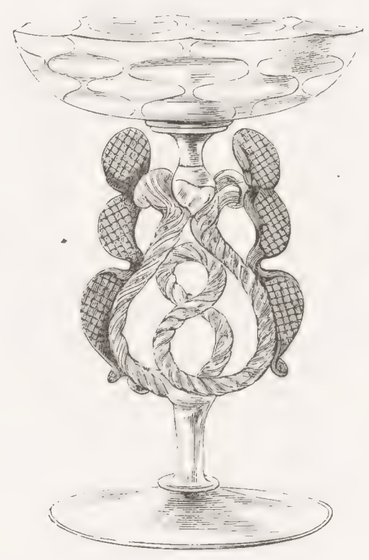


Fig. 168.

571. Tazza Wine Glass; decorated on the bowl with diamond etched birds and flowers. The stem is formed of a rod twisted into the figure 8, and enclosing threads of white and red glass; the wings are of bright blue. *Height* $5\frac{1}{8}$ *in.* *Fig.* 166.

572. Wine Glass; with a funnel-shaped bowl. The stem is formed of two conjoined vertical rods surmounted by two bosses and enclosing threads of white and blue glass. *Height* $6\frac{5}{8}$ *in.* *Fig.* 167.

573. Tazza Wine Glass; with a diamond-moulded bowl. The stem forms the figure 8, and encloses white threads; the wings are bright blue. *Height* $5\frac{1}{2}$ *in.* *Fig.* 168.

574. Tazza Wine Glass, with a bolder bowl than the preceding. The stem forms a triangle surrounding the figure 8, and encloses two white threads; two blue strawberry bosses project from the summit as in *Fig.* 167. *Height* $5\frac{3}{8}$ *in.*

575. Tall Goblet; with a bowl resting on a blue bordered convoluted stem, enclosing white, red, and blue threads. *Height* 10 *in.* *Fig.* 169.

PLATE 8.

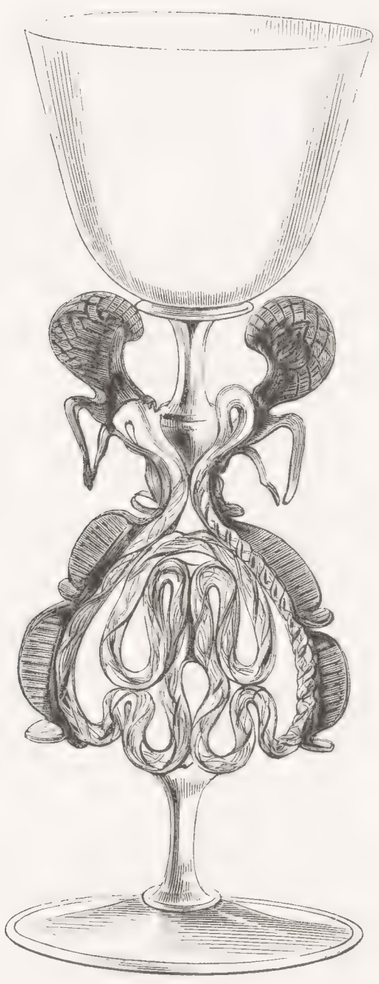


Fig. 169.

Fig. 170.

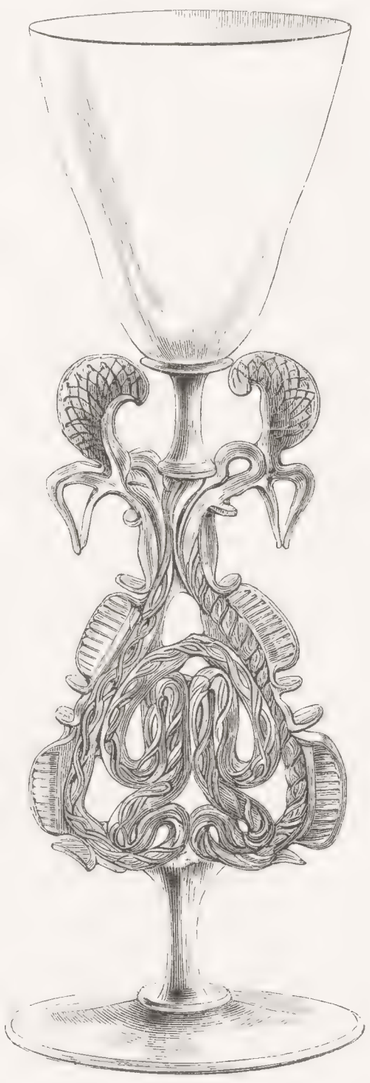


Fig. 171.

Fig. 172.

576. Tall Goblet; the stem has greenish blue wings, and encloses thick white, dark red, and yellow threads. *Height* 12½ *in.* *Fig.* 170.

577. Tall Goblet; having a very handsome stem, the central portion of which is a large medallion in form of an anemone, composed of small overlapping circular plates of white enamel, streaked with blue, yellow, and red; surrounding this is a hoop of clear glass denticulated and enclosing two threads, thick white, and red. *Height* 13 *in.* *Fig.* 171. (Bernal Coll.)

578. Tall Goblet; the stem of which has gilt wings and encloses thick white, blue, and red threads. *Height* 10⅛ *in.* *Fig.* 172.

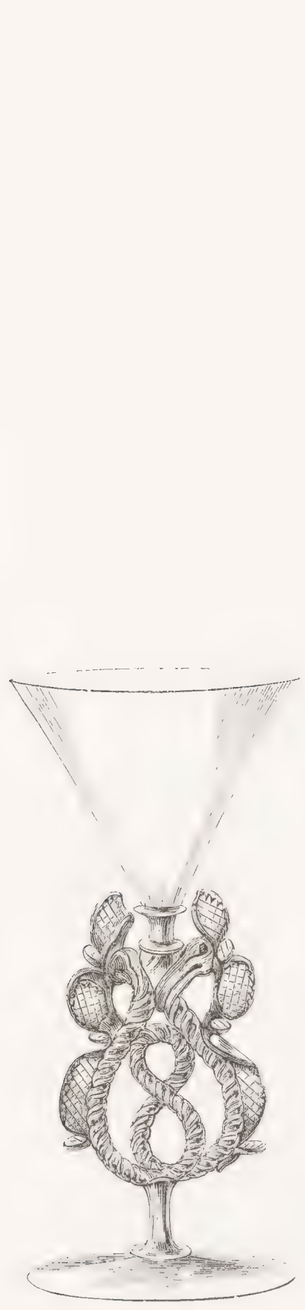


Fig. 174.

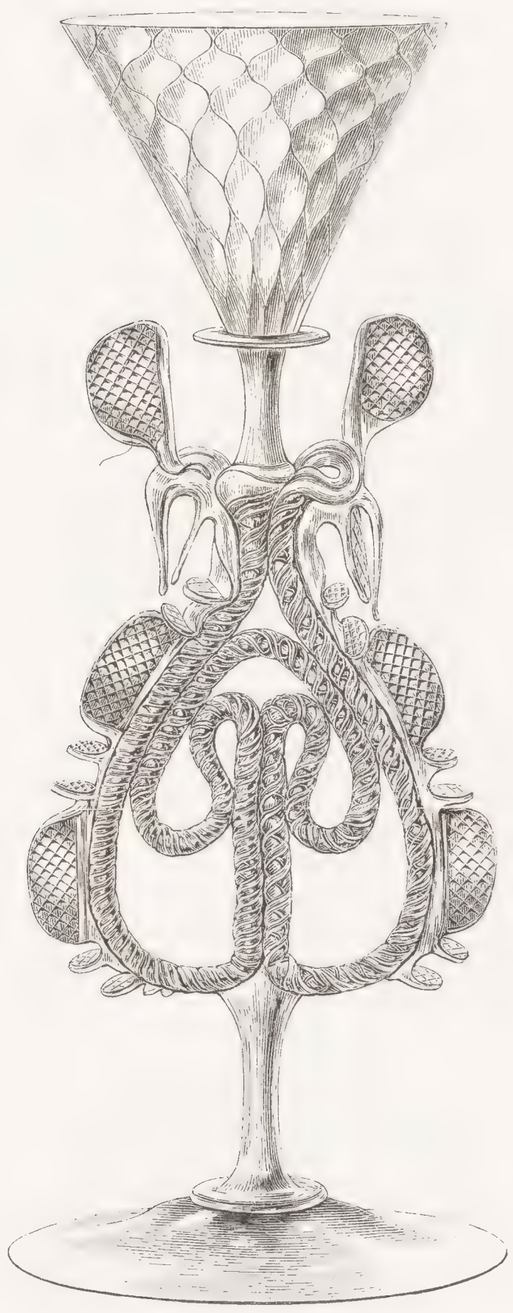


Fig. 173.

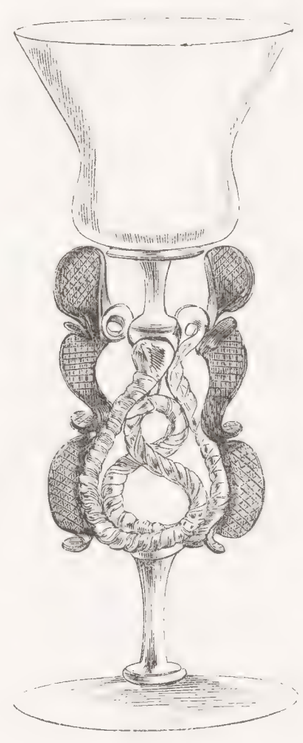


Fig. 175.

579. Tall Goblet, with a diamond-moulded bowl; the stem encloses white, yellow, and red threads, and is flanked with crested serpents' heads, etc. *Height* 9⅞ *in.* *Fig.* 173. (The scale of this figure is rather larger than that of the accompanying figures.)

580. Tall Wine Glass; the bowl of which rests on a stem forming the figure 8, and enclosing two threads, white and red. *Height* 6¾ *in.* *Fig.* 174.

581. Tall Wine Glass; having a somewhat thistle-shaped bowl. The stem forms the figure 8, and encloses two white threads; the border is denticulated and of bright blue glass. *Height* $7\frac{1}{4}$ *in.* *Fig.* 175.

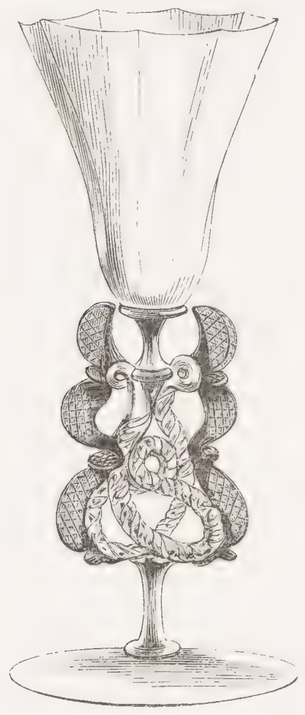


Fig. 176.

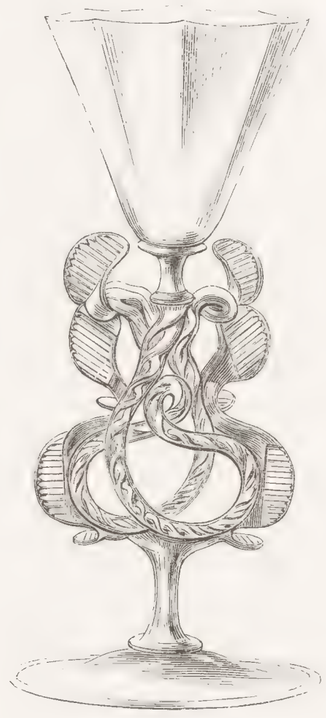


Fig. 177.

582. Tall Wine Glass; with octagonal facets on the bowl. The stem is a convoluted rod enclosing two white threads, and flanked with bright blue denticulations. *Height* $7\frac{3}{8}$ *in.* *Fig.* 176.

583. Tall Wine Glass; with octagonal facets on the bowl. The stem has clear glass denticulations, and encloses white, purple, and red threads. *Height* $7\frac{1}{2}$ *in.* *Fig.* 177.

584. Tall Goblet; the stem of which forms the figure 8, and encloses two thick latticinio threads; bright blue serpents' heads, etc., flank the rod. *Height* $10\frac{1}{2}$ *in.* *Fig.* 178.

585. Tall Goblet; the stem of which forms the figure 8, and encloses three thick threads, white, red, and blue; crested serpents' heads and denticulations flank the rod. *Height* $10\frac{7}{8}$ *in.* *Fig.* 179.

586. Tall Goblet; the stem of which forms the figure 8, and encloses two thick latticinio threads; the rod is edged with crested serpents' heads, etc. *Height* $11\frac{3}{8}$ *in.* *Fig.* 180.

587. Tall Goblet; having a bowl and foot both of purple glass. The stem is elaborately convoluted, and encloses white, red, and blue threads; crested serpents' heads, etc., border the rod. *Height* $11\frac{5}{8}$ *in.* *Fig.* 181.

588. Tall Goblet; having a convoluted stem enclosing two thick latticinio threads, and bordered with light blue crested serpents' heads, etc. *Height* $11\frac{5}{8}$ *in.* *Fig.* 182.

589. Tall Goblet; having an oviform bowl with a dome cover, and resting on a convoluted stem enclosing two intersecting spiral cords, each of which is

PLATE I.

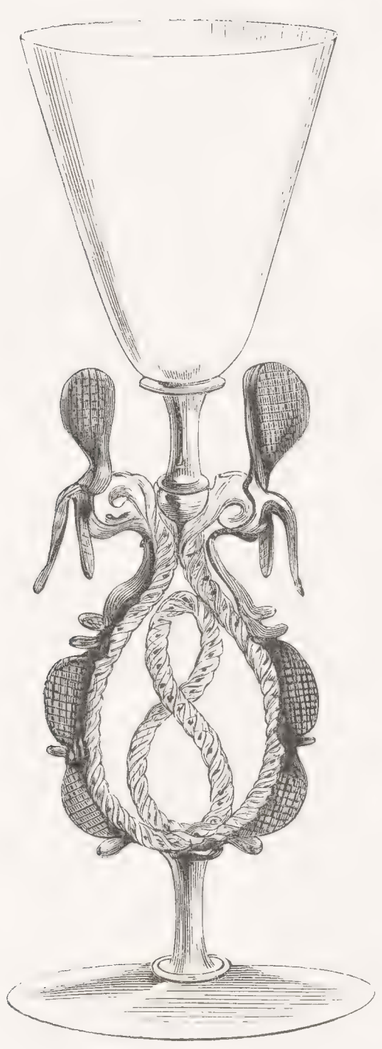


Fig. 178.

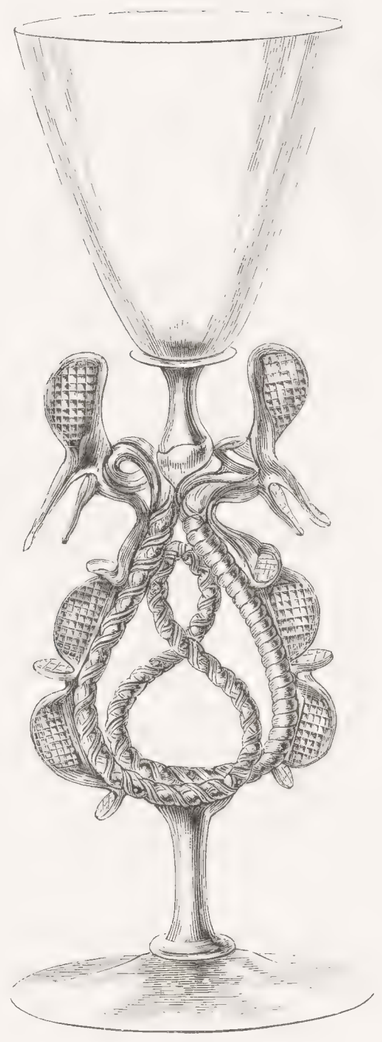


Fig. 179.

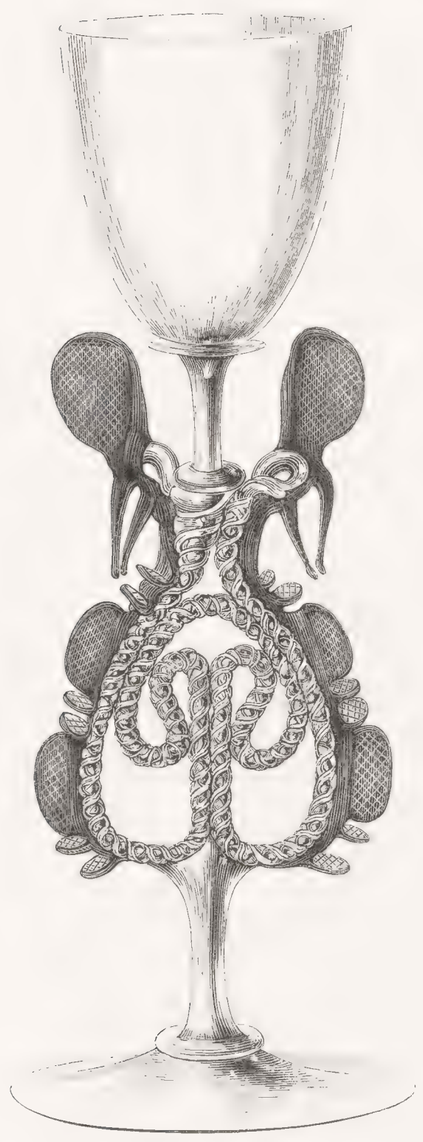


Fig. 180.

Fig. 181.

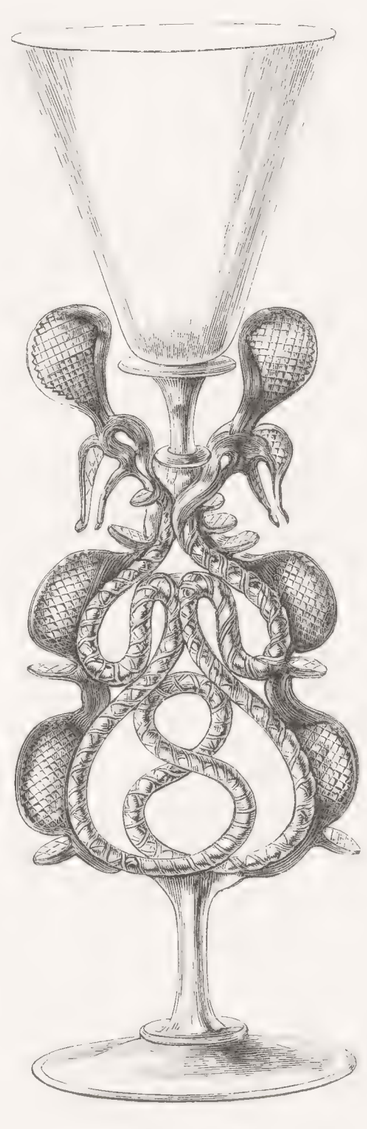


Fig. 182.

VENETIAN GLASS.

composed of three threads, red, white, and yellow. The cover is surmounted by a similarly convoluted ornament crowned with a blue dove, and bordered, as the stem is, with crested serpents' heads and pinched denticulations in blue glass. *Height* 19½ *in.*

D. GLASS WITH OPAQUE WHITE FILAMENTS.

1. Striped or Arranged in Simple Lines.

Glass of this description owes its decoration principally to threads or thin canes of milky-white opaque glass, termed latticinio by the Italians, worked into the metal before it is blown into form. The canes in the following specimens are usually arranged in simple parallel lines or stripes, alternating with bands of transparent glass.

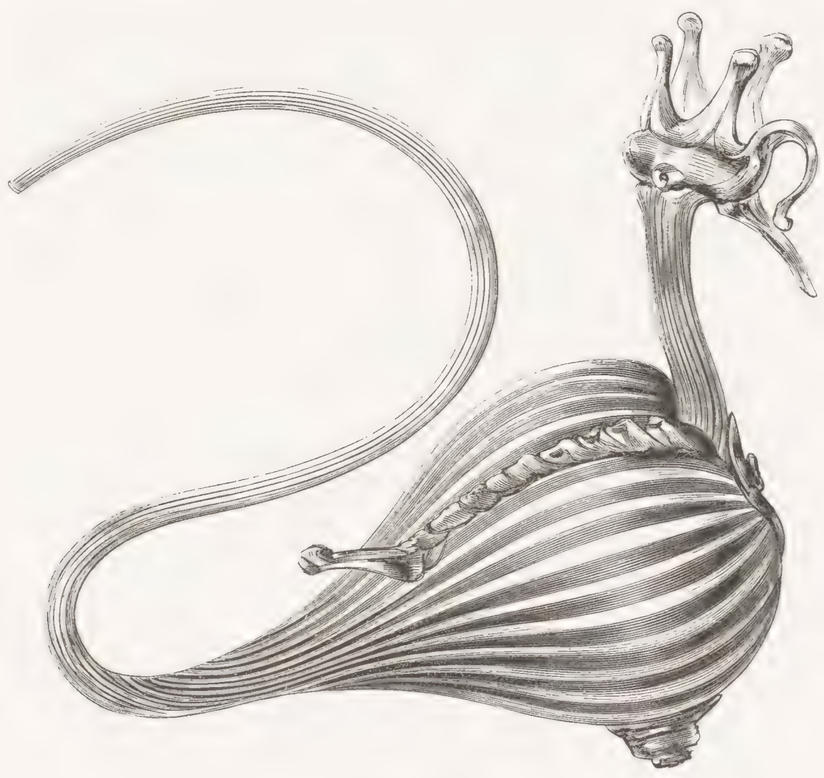


Fig. 183.

590. Coronetted Bird, of striped glass and quaint appearance. The neck and wings are of amber toned glass; the base of the neck is ornamented with a small oval disk bearing a boss, and beneath is a projection indicating that this curious specimen once surmounted a large vessel. *Height* 6 *in. Length* 7 *in. Fig.* 183.

591. Tall Goblet; having a very elongated oviform bowl, extending two-thirds downwards, and a bold short stem of the same character as that of *Fig.* 133; the bowl is covered with a series of nearly adjoining thick vertical stripes of white curving slightly at their summits. *Height* 9 *in.*

592. Goblet; having a graceful thistle-shaped bowl, broadest at the mouth,

and pressed from half-way downwards into a series of grape-like bosses. It rests on a small bulb and bell-foot, ornamented like the bowl with vertical white stripes, but lying closer together on the former than on the latter. *Height* $5\frac{3}{4}$ *in.*

593. Goblet; the bowl is similar to that of *Fig.* 106, and is covered with a series of nearly adjoining diagonal, narrow stripes of opaque white; the stem is ornamented with bosses and gadroons. *Height* $6\frac{7}{8}$ *in.*

594. Large Beaker, nearly cylindrical but curving outwards slightly at the summit, and vertically channelled; it is ornamented with a series of adjoining ribbon-like, semi-transparent, wavy stripes of white, running diagonally, and rests on a gilt gadroon rim. *Height* $7\frac{1}{2}$ *in.*

595. Beaker, expanding conversely at the mouth from a long narrow cylindrical body; it is covered with adjoining diagonal stripes, principally white, separated at intervals, into bands, by purple, blue, and yellow lines. *Height* 7 *in.*

596. Quaint Wine Glass; tapering downwards from a horizontal lip, and having two small indented handles projecting from its lower end with intermediate bosses; it rests on a very short and slender stem, and is ornamented with widely separated vertical stripes of white. *Height* $4\frac{5}{8}$ *in.*

597. Tazza Wine Glass; having an embayed bowl, similar to that of *Fig.* 130, and ornamented round its margin with a band of eight contiguous latticinio lines; it rests on a fluted baluster stem. *Height* $4\frac{3}{8}$ *in.*

598. Tazza; having a deep bowl, ornamented in the centre with a star, or flower, of seven points formed of curved white lines, radiating from the centre, and surrounded by a band composed of three white stripes, above which is a similar band; it rests on a drop-shaped stem and a bell-foot closely covered with thin vertical stripes. *Height* $4\frac{3}{8}$ *in.*

599. Quaint Tazza; having a wide expanding horizontal lip, and a narrow orifice leading into a small handsome bulb; the whole is striped at intervals with white, and rests on a very slender column rising from a slightly conical foot. *Height* $6\frac{3}{4}$ *in.*

600. Cylindrical Cup; it is ornamented, to half-way down, with a band of contiguous encircling white lines, and with three blue strawberry bosses at the base. *Height* $2\frac{7}{8}$ *in.*

601. Vase; having a large bulbous centre and resting on a low conical foot; it is ornamented with widely separated diagonal white stripes. *Height* $5\frac{1}{2}$ *in.*

602. Small Vase; having a more compressed bulbous centre than the preceding, and ornamented with widely separated vertical lines. *Height* $3\frac{1}{2}$ *in.*

603. Vase; having a flattened tapering oviform body with a narrow neck and a trough-like mouth overhanging the front and back. A zig-zag fillet encircles the neck, and a plain gilt belt surrounds the shoulder, supporting between them two handsome scroll handles which terminate vertically with pinched ends. This elegant vase rests on a small compressed bulb and a slightly conical foot, and is ornamented with two gilt masks on the central parts of the lower belt. *Height* $7\frac{1}{2}$ *in.*

604. Mug, cylindrical, but tapering slightly upwards and having a scroll handle, and a central medallion in front with a gilt satyr's head. The surface of this handsome vessel is divided into five vertical compartments by equi-distant blue stripes, between which are close parallel white stripes. *Height* $4\frac{1}{2}$ *in.*

605. Small Salt Cellar, of amber-toned glass; having a gracefully shaped compressed bulbous body, re-curving sharply so as to form an overhanging lip, and resting on a slightly conical foot; the lip encloses a blue thread, and three blue handles project from it alternating with blue strawberry bosses. The body of this pretty vessel is further ornamented with widely separated white stripes descending vertically. *Height* $1\frac{7}{8}$ *in.*

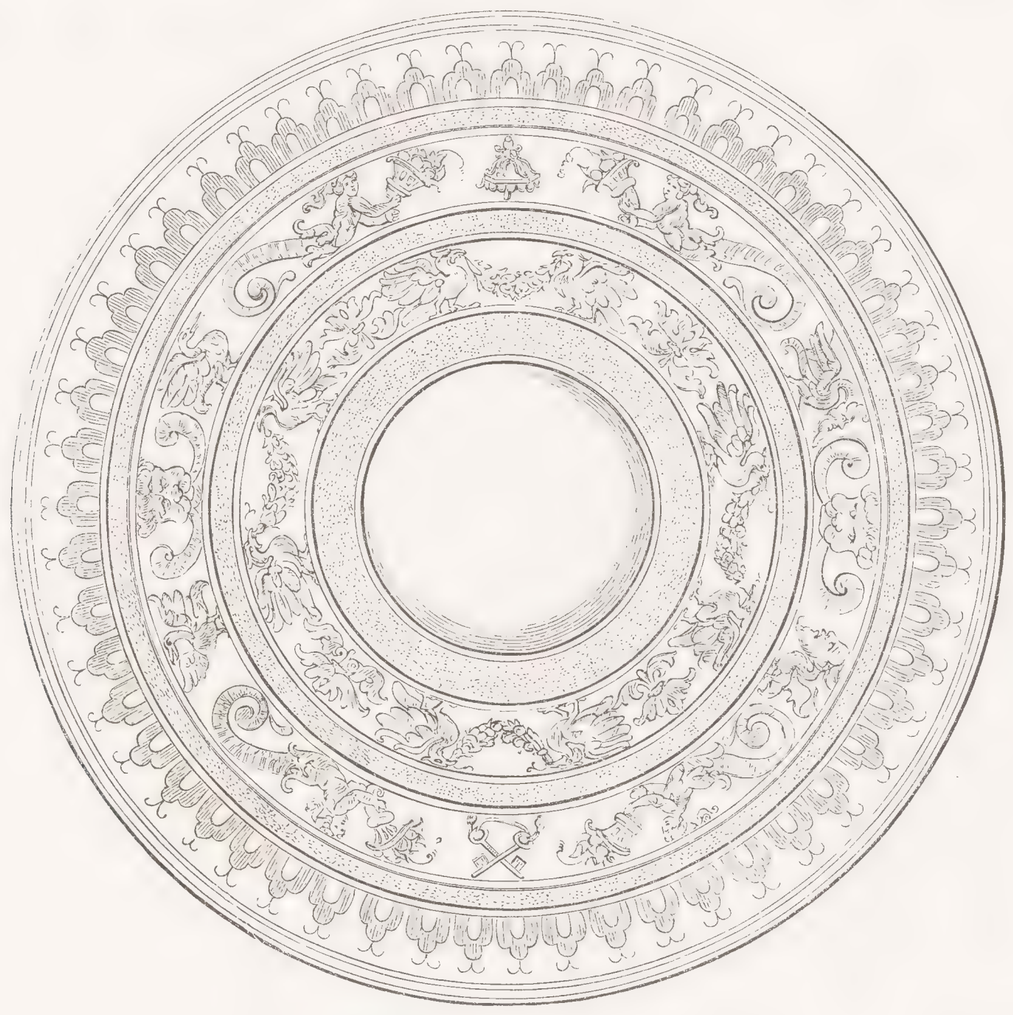


Fig. 184.

606. Large Plate, having a deep centre and a broad rim; it is ornamented with three bands sprinkled with gold and edged with latticinio. Between the bands are etched arabesques, chiefly masks and monsters, among them are the cross-keys and two papal gonfanons; near the edge of the rim are etched scallops. The insignia are those of a generalissimo of the papal armies, and were introduced into the arms of the Dukes of Ferrara and of Urbino who held that office. It is probable that this dish formed part of a service belonging to one of those potentates. *Diameter* $10\frac{3}{8}$ *in.* *Fig.* 184.

607. Plate, of a similar form and decoration to the preceding; but there are only two bands of etched work, and the bands of latticinio are composed of net-work, combined, in two cases, with blue threads. The etched bands, of insignia, etc.,

correspond with the middle and outer bands of etching, represented in *Fig.* 184. *Diameter* 11 *in.*

608. Plate, having a wide margin and sunk centre; it is ornamented with a light blue line enclosed in the edge, and with a series of white spiral lines gracefully radiating from the centre. *Diameter* $9\frac{1}{8}$ *in.*

609. Essence Sprinkler, of oriental form; having a spherical body supporting a small compressed bulb, above which is an elongated bulb terminating in a point; broad closely laid diagonal stripes of white, gradually decreasing in width, cover the surface. *Height* $7\frac{1}{4}$ *in.*

610. Long necked Bottle; having a spherical body, with a very long slender neck encircled with two zig-zag fillets, and surmounted with a pewter stopper; equi-distant vertical stripes of white run very widely apart over the body. *Height* $14\frac{1}{2}$ *in.*

611. Long necked Bottle, a companion to the preceding.

612. Slender Bottle, having a short neck and a quadrilateral body, slightly rounded at the edges; it is ornamented with contiguous broad white vertical stripes. *Height* 5 *in.*

613. Biberon, having a spherical body resting on an expanding rim and supporting a long neck with an expanding mouth; attached to a blue zig-zag fillet is a handle curved, flattened, and hatched, opposite to which is a curved spout; it is ornamented with widely separated equi-distant thin white stripes. *Height* $5\frac{1}{2}$ *in.*

614. Bottle, egg-shaped, with compressed sides and a very short neck; two separate broad bands of dark blue glass, bordered with white, encircle the upper part, beneath which are thick vertical stripes, alternately white and blue, meeting in the centre of the base. *Height* $5\frac{3}{8}$ *in.*

2. With Festoon Ornaments.

In these specimens the white decoration in latticinio has taken a wavy form from the effects of blowing, and exhibits festoon-like ornaments.

615. Goblet; having an elongated oviform bowl, and bulbed stem flanked with two opaque yellow scroll wings edged with clear glass denticulations. The white festoons on the bowl are nearly uniform in size, and run in regular connected bands, assuming, with the points of the festoons, a diagonal direction somewhat as in *Fig.* 186. *Height* $6\frac{3}{8}$ *in.*

616. Small Vase, of amber glass; similar in body form to *Fig.* 157, but having a much broader slightly concaving neck, encircled with a zig-zag fillet connecting two denticulated scroll handles like that in *Fig.* 143. Vertical bands of pointed festoons in white decorate the body. *Height* $5\frac{5}{8}$ *in.*

617. Small Vase, of greenish toned glass, festooned with white. It has a tapering cover and two boldly denticulated scroll handles attached to a round base and almost cylindrical body. *Height* 5 *in.*

Plate XVI.

VENETIAN GLASS.

618. Small Flacon, similar in form to *Fig.* 198, without the base rim and cover; the wing scrolls are blue with clear glass denticulations. It is ornamented with diagonal bands of sharply pointed white festoons increasing in boldness downwards. *Height* $4\frac{1}{2}$ *in.*

619. Small Flacon, a companion to the preceding, but festooned with white in a rather bolder and less regular style.

620. Toy Flacon, of rich blue glass festooned with white; in form it is entirely like *Fig.* 198, but without the scroll wings; the knob on the cover is of yellow glass, and attached to the bulb are two small wings composed of yellow and clear glass. *Height* 3 *in.*

Fig. 185.

621. Covered Jug, of greenish blue glass handsomely festooned with white; the cover is surmounted by an opaque blue and white ornamental knob, and is decorated, as is also the lower end of the body, with blue and white flower bosses having yellow eyes; small gilt strawberry bosses lie between the flowers; the handle and base rim are of clear glass. *Height* $9\frac{1}{2}$ *in.* *Fig.* 185.

622. Covered Jug, a companion to the preceding.

623. Small covered Bowl, festooned and ornamented with four medallions containing lions' heads, between which are blue strawberry bosses; a dark blue knob streaked with white surmounts the cover, and a rim of light bright blue glass encircles the bowl. *Height* $4\frac{3}{8}$ *in.* *Coloured Plate* XVI. *Fig.* 1.

624. Small Sceau or Pail, of bright blue glass; having an ogee form ornamented with handsome white festoons, somewhat like those in *Fig.* 185 but more graceful and regular. To the mouth a moving handle of crinkled clear glass is attached, and a clear glass ring supports the vessel. *Height* $2\frac{7}{8}$ *in.*

625. Cup or Bowl, of a broad bell shape, beautifully festooned in white with diagonal bands of very regularly formed acute loops; it has an opaque yellow mouth rim, and two side handles, formed of blue scrolls edged with clear glass denticulations. *Height* $2\frac{5}{8}$ *in.*

626. Toy Cup, almost cylindrical, having two small blue loops projecting from the lower end, and ornamented similarly to *Fig.* 185. *Height* $2\frac{1}{8}$ *in.*

627. Small Bowl, of amber glass, hemispherical, and entirely covered with conjoining oblique bands of thick white shallow wavelets; two small scroll handles of clear glass are attached to the bowl, which rests on a graceful bell-foot likewise of clear glass. *Height* $2\frac{3}{4}$ *in.*

Fig. 186.

628. Biberon, of amber-toned glass, quaint in form, and festooned in white; it has a knob, neck fillet, and spout rim, all of blue glass. *Height* $6\frac{1}{2}$ *in.* *Fig.* 186.

629. Biberon, entirely of amber-toned glass, somewhat similar in form to *Fig.* 186, but having a larger body in proportion to the neck, and round pointed festoons of white. *Height* $6\frac{1}{2}$ *in.*

630. Scent Bottle, of greenish blue glass, pear-shaped, with a small expanding mouth, and ornamented with bands of very thick festoons in white. *Height* 3 *in.*

631. Small Scent Bottle, of rich amber glass, having a dome-shaped body surmounted with a spherical neck and a handsome quaint metal stopper; three

separated bands of white festoons encircle it horizontally at the summit, centre, and base. *Height* $2\frac{3}{4}$ *in.*

632. Scent Bottle, of amber-toned glass, having a flattened spherical body, short cylindrical neck, and a green lip; the white festoons run almost zigzagging in connected horizontal bands. *Height* $2\frac{7}{8}$ *in.*

633. Scent Bottle, of smoky glass, similar to the preceding in form, but ornamented with rounder pointed festoons in white. *Height* $3\frac{1}{8}$ *in.*

634. Scent Bottle, of smoky glass, having a flattened spherical body with a short neck and a small foot; it is ornamented with widely separated horizontal bands of shallow white wavelets, and has two projecting side frills and two central strawberry bosses of opaque white glass. *Height* 3 *in.*

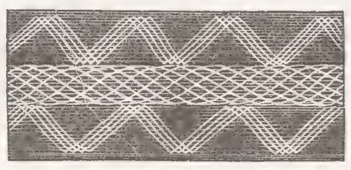
Fig. 187.

635. Hanging Lamp, of greenish amber-toned glass ornamented with bands of white festoons, and having silk suspending cords passing through two large beads of clear glass. The lip and the ornaments on the beads are of blue glass. *Height* $5\frac{1}{2}$ *in.* *Fig.* 187.

636. Vase, of green-hued glass; the body gracefully tapers downwards, and then expands at the base, which is flat. The whole is decorated with very bold white festoons elongating more and more downwards, and becoming very pointed in character. *Height* $8\frac{1}{2}$ *in.*

3. With Lace or Filigree Patterns.

The rods, of which the decoration displayed on this kind of glass is composed, are each of a complicated pattern, like filigree or network; and the decoration is obtained by placing these rods either side by side, so that they almost join and form an elegant whole, or apart, so as to be separated by bands of clear glass.



a

Fig. 188.

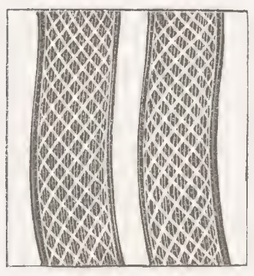


Fig. 190.

Fig. 189.

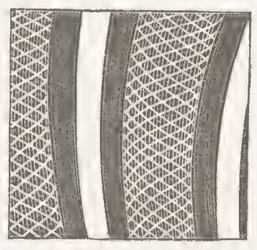


Fig. 191.

637. Tall Goblet, having a very large bowl, resting on a bulb and bell-foot. Encircling the mouth are two raised belts of white filigree, etc., as in *Fig.* 188; beneath are six long vertical loops of network, raised, and of the thickness and character of band *a* of this figure; the rest of this handsome vessel is covered with network, like that on *Fig.* 207. *Height* $9\frac{5}{8}$ *in.*

638. Large Goblet; bulbous at its lower end, and expanding, from about one-third upwards, into a large basin form; the bowl rests on two small compressed bulbs and a bell-foot. The whole is covered with diagonal bands of bold irregular white network edged with a white stripe, like *Fig.* 189. *Height* $8\frac{3}{4}$ *in.*

639. Goblet, of a singular form; having a bell-foot with a bulb, supporting five compressed bulbs, respectively increasing in width upwards, and forming the lower half of the bowl, the upper half of which is somewhat thistle-shaped. It is decorated like *Fig.* 190. *Height* $6\frac{3}{4}$ *in.*

640. Goblet, with a very elongated bell-shaped bowl, resting on a small bulb and bell-foot. It has two raised belts of white network, somewhat like *a*, *Fig.* 188, encircling the upper half, and fourteen raised white vertical stripes on the lower half; beneath it is covered with contiguous vertical white stripes to the extremity of the foot. *Height* $6\frac{1}{8}$ *in.*

641. Goblet, with a broad bell-shaped bowl resting on three small bulbs and a bell-foot. It is entirely covered with white network, as *Fig.* 191. *Height* 6 *in.*

642. Goblet, having a long funnel-shaped bowl, with eight embayments, alternately angular and circular, and resting on a bulb and bell-foot. It is

ornamented, down the centre of each projection, like the middle band of *Fig.* 194. *Height* $7\frac{1}{2}$ *in.*

Fig. 192.

643. Large Vase, or Goblet, having a dome cover with three strawberry bosses. The whole is ornamented with white filigree. *Height* 10 *in.* *Fig.* 192.

644. Goblet, having a hemispherical bowl, with six circular embayments, and resting on a compressed bulb supported by a smaller bulb and a bell-foot. It is entirely covered with a white lace pattern, as *Fig.* 193. *Height* $4\frac{1}{2}$ *in.*

645. Tumbler, having a concaving funnel-shaped bowl, with an expanding base. It is covered with a lattice or diamond pattern, as *Fig.* 195. *Height* $4\frac{5}{8}$ *in.*

Fig. 193.

Fig. 194.

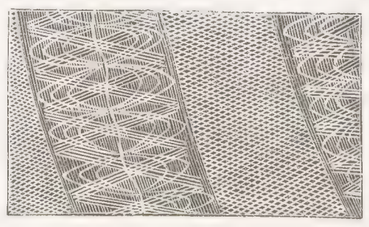


Fig. 198 *a.*

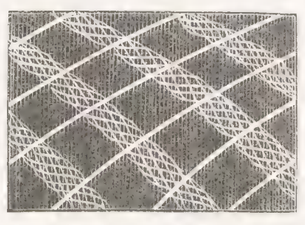


Fig. 195.

(*Fig.* 198 *a* is the fac-simile of the filigree decoration of No. 651.)

646. Goblet, cylindrical, and covered with bands of coarse network, arranged vertically, and of four different patterns; viz., white; white, blue and yellow; white, blue, red and maroon; and white, intersected with a maroon-edged white ribbon. The coloured work also intersects the network in spiral stripes or ribbons. *Height* $3\frac{3}{8}$ *in.*

647. Tall Wine Glass, with a long oviform bowl, resting on a small bulb and a long bulb. The decoration is like *Fig.* 194. *Height* $6\frac{7}{8}$ *in.*

648. Tall Wine Glass, in form like the preceding, and entirely covered with white filigree, similar to that of *Fig.* 199. *Height* $6\frac{7}{8}$ *in.*

Figs. 196, 197.

649. Low Wine Glass, having a broad hemispherical bowl resting on a baluster stem flanked by denticulated wings. It is entirely covered with fine white filigree. *Height* $5\frac{1}{4}$ *in.* *Fig.* 196.

650. Low Tazza, having a very shallow bowl, resting on a bell-foot. The whole is ornamented with adjoining bands of latticinio work of four patterns. *Height* $1\frac{3}{8}$ *in.* *Diameter* 7 *in.* *Fig.* 197.

651. Tazza, having a shallow bowl, slightly embossed so as to form a series of wavelets with angular points round the margin, and resting on a gracefully-elongated stem with a conical foot. The whole is formed of lace glass of a very minute and delicate character. *Height* 6 *in.* *Diameter* $6\frac{1}{2}$ *in.* *Fig.* 198.

This elegant Tazza was bequeathed to Mr. Slade, by the late Sir Charles Rugge Price, by whom it was highly esteemed as a chef d'œuvre in every respect.

652. Small covered Vase, or Flacon, decorated with plain glass denticulated wings, and with fine white lace work. *Height* $6\frac{1}{2}$ *in.* *Fig.* 199.

653. Biberon, having a scalloped mouth, a handle surmounted by a medallion bearing a gilt satyr head, and a spout with a similar medallion at its base. Fine latticinio filigree covers the whole. *Height* $6\frac{3}{4}$ *in.* *Fig.* 200.

PLATE 2.

Fig. 198

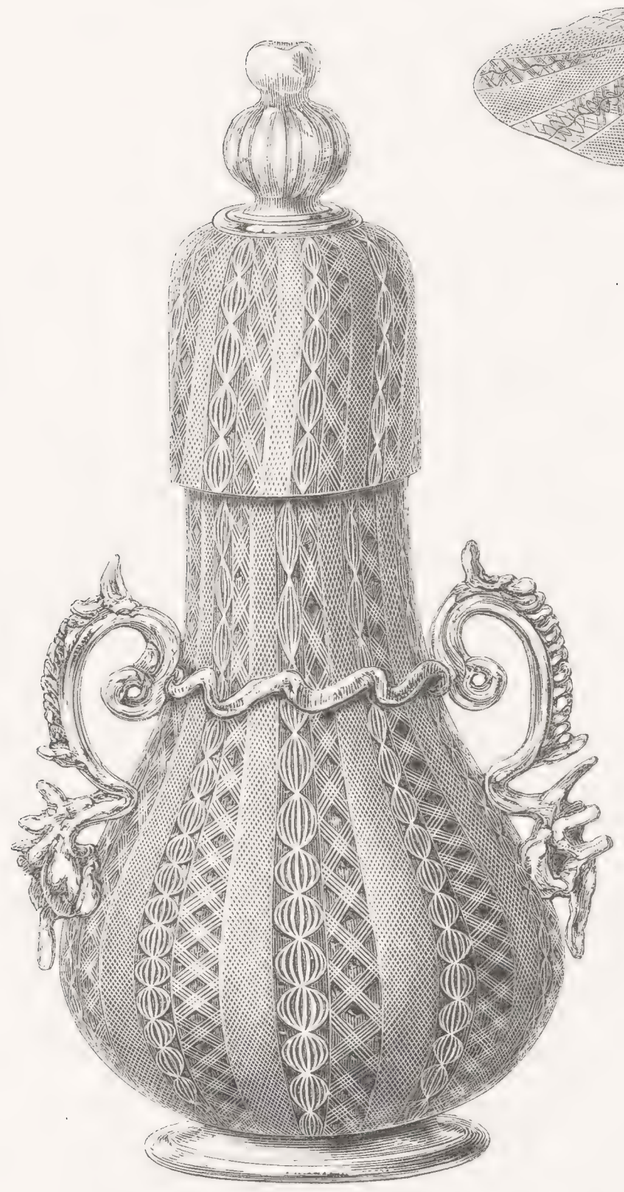


Fig. 199.

Fig. 200.

654. Small Vase, or Flacon, similar in decoration and form to *Fig.* 199, but having neither cover nor wings. *Height* $5\frac{1}{8}$ *in.*

655. Small Vase, with an elongated, bell-shaped bowl, resting on a bulb and bell-foot. The whole is covered with vertical bands of fine white filigree, as *Fig.* 201, the central band of which has a pink stripe extending along it. *Height* 5 *in.*

656. Basin; hemispherical, and ornamented with white filigree, as *Fig.* 202, but the plain white stripes are raised. *Height* 3 *in.* *Diameter* $4\frac{7}{8}$ *in.*

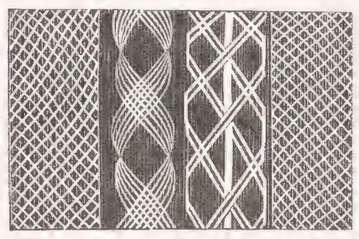


Fig. 201.

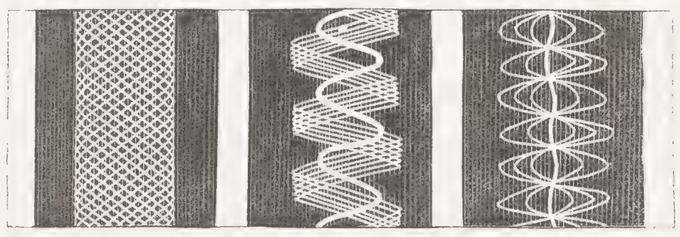


Fig. 202.

657. Cup, with an ogee body; ornamented with vertical bands of white lace glass, in ten sets, alternately separated by a crimson stripe, and a spiral white and crimson ribbon; each contains a central band of fine network, with two zig-zag filigree bands. *Height* $2\frac{7}{8}$ *in.*

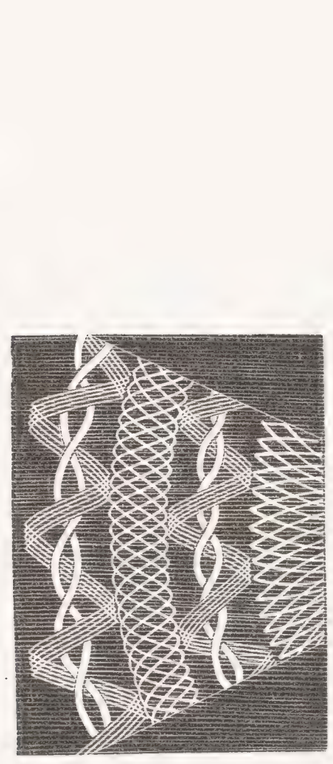


Fig. 203.

Fig. 205.

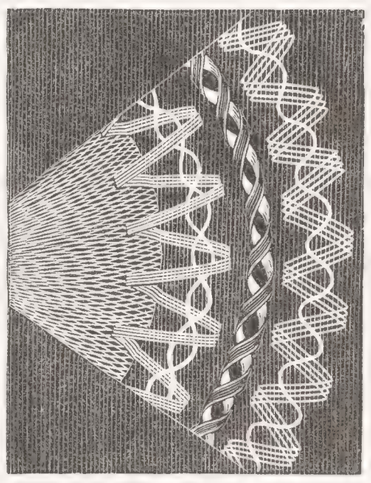


Fig. 204.

658. Low Tazza, having a shallow bowl, resting on a bulb and bell-foot. Encircling the plate are two separated, narrow belts, of bold latticinio network and a central ornament, composed of four connected belts (*Fig.* 203); beneath

is a series of contiguous vertical stripes extending to the extremity of the foot. *Height* $3\frac{1}{4}$ *in.* *Diameter* $6\frac{3}{4}$ *in.*

659. Low Tazza, having a shallow bowl, resting on a bell-foot. Encircling the bowl are two separated latticinio belts, surrounding a circular central ornament composed of beautifully executed network, etc. The device (*Fig.* 204) consists of three open, tubular, spiral belts, the outer ones composed of latticinio, and appearing like zig-zagging wire springs, having serpentine lines running down their centres, and the central one made of blue and latticinio bands intertwined so as to appear like twisted ribbons; from the lower belt a series of reticulated white threads of the most delicate character, radiate to the centre, and sink into the stem, where they connect themselves with bolder network, which reaches to the extremity of the foot. *Height* $2\frac{1}{2}$ *in.* *Diameter* $7\frac{1}{4}$ *in.*

660. Tall Bouquetier; of elegant form, pressed into a series of large bulbs, increasing in size to the centre of the vessel, and then tapering off gracefully into a long, slender neck, pressed into a series of small bulbs. The whole is covered with bands of white filigree. *Height* $9\frac{1}{2}$ *in.* *Fig.* 205.

661. Quaint Bouquetier, or Bottle, of lace glass, similar to the pattern on *Fig.* 206, but more delicate. It rises, from a bell-foot and compressed bulb, into a balloon-shaped body, and contracts suddenly into a narrow neck, which inclines forwards, and terminates in a triangular mouth. The body is moulded, or embossed in relief, with a band, consisting of two lions and two double-headed eagles, with gadroons above and below them. *Height* $6\frac{3}{4}$ *in.*

662. Small Bouquetier; rising from a compressed bulb and bell-foot into a balloon-shaped body, with a very short, narrow neck. It is covered with bands of white network and stripes (like *Fig.* 209), running vertically. *Height* $6\frac{1}{2}$ *in.*

663. Small Bouquetier; having a pear-shaped body, supporting a small bulbous neck with a horizontal lip; six gilt strawberry bosses and three large gilt satyrs' heads are situated close to the base. The whole is decorated similarly to *Fig.* 210. *Height* $4\frac{1}{2}$ *in.*

664. Ewer, of very handsome form, ornamented with filigree, composed of lace canes, of a twisted pattern, forming a network design, alternating with narrow stripes of plain latticinio. It has a trefoil mouth, and a plain handle of opalescent glass, terminating in a lion's head; the body is embossed by means of a mould, and has round it, in a band, two pairs of lions, fronting, with flowers between their heads; above and below are moulded gadroons. The foot is mounted in a metal rim. *Height* $11\frac{3}{4}$ *in.* *Fig.* 206.

665. Pilgrim's Bottle; having a compressed, circular body, with a long neck, and four side loops for the purpose of suspension. The whole is decorated with network. *Height* $10\frac{1}{4}$ *in.* (Préaux Coll.) *Fig.* 207.

666. Large covered Beaker, of a tapering form, and covered with bands of bold filigree alternating with plain white stripes. *Height* 11 *in.* *Fig.* 208.

667. Vase of good form, having a bulbous body (somewhat similar in form to that of *Fig.* 1, *Coloured Plate* XVIII.); the neck is long and broad, and

Fig. 206.

Fig. 207.

Fig. 208.

VENETIAN GLASS.

encircled with a fillet, to which two scroll handles are attached which rest on the shoulder. The body is decorated with opaque yellow, coarse network, running nearly vertically, in sets of four contiguous bands, each set being separated by a parallel band of coarse white filigree, arranged in short loops. *Height* $6\frac{1}{2}$ *in.*

668. Scent Bottle; having a small concaving neck and spherical body, compressed quadrilaterally; the whole decorated like *Fig.* 210. *Height* $3\frac{1}{2}$ *in.*

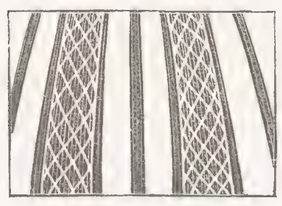


Fig. 209.

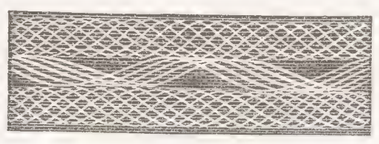


Fig. 211.

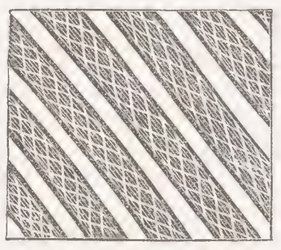


Fig. 210.

669. Scent Bottle; somewhat pear-shaped, with a short, broad neck. It is ornamented with vertical bands of coarse, white network, separated from bands of connected stripes of red, yellow, blue, and white glass. *Height* $4\frac{1}{4}$ *in.*

670. Scent Bottle, quadrilateral, but having rounded corners and shoulders, and each side deeply depressed in the centre; a silver gilt stopper and chain is attached to a short neck. Surmounting it are widely-separated, vertical bands of linked, white looplets. *Height* $3\frac{1}{4}$ *in.*

671. Long Scent Bottle, quadrilateral, with rounded edge and shoulder, and a very short neck. The whole is covered with fine latticinio network, forming diamond-shaped loops. *Height* $4\frac{1}{2}$ *in.*

672. Sceau, or Bucket, having a moveable handle, enclosing latticinio filigree, and an ogee body, pressed out into bulbs around its lower half. The body is covered with vertical bands of bold white network, alternating with bands of intertwined, ribbon-like canes, blue and white, like *Fig.* 204; between the bands are white stripes. *Height* $3\frac{1}{2}$ *in.* *Diameter* $5\frac{1}{2}$ *in.*

673. Tazza, having a deep bowl, with eight foliations, resting on a bulb and bell-foot. The bowl is handsomely decorated with large, irregular lattice-work, formed by diagonal bands of white filigree, of two patterns, intersected by other patterns partially in relief. *Height* $3\frac{3}{4}$ *in.* *Diameter* $6\frac{1}{4}$ *in.*

674. Tazza, with a shallow bowl, resting on a bulb and bell-foot. The bowl is encircled by two separated, raised, network belts (*Fig.* 211); beneath these, radiating from the centre, are a series of loops, formed of short, intersecting, snake-like bands of bold latticinio filigree work; the stem and foot are covered with intersecting white threads. *Height* $3\frac{3}{4}$ *in.* *Diameter* 7 *in.*

675. Tazza; having a shallow bowl, resting on a bold baluster stem and a flat foot ribbed and semé d'or. The bowl is ornamented with two belts semé d'or, having edges of fine white network. *Height* 5 *in.* *Diameter* 6 *in.*

676. Tazza, with a deep bowl, resting on a bulb and bell-foot. Radiating from the centre, spirally, are separated, narrow bands of very effective white filigree (of the same character as that in *Fig.* 205), which extend to the margin

of the bowl; on the foot is the same ornament in wider bands. *Height* $3\frac{7}{8}$ *in.* *Diameter* $6\frac{3}{4}$ *in.*

677. Low Tazza, similar in form to the preceding. The whole is covered with contiguous bands of bold latticinio filigree, radiating spirally from the centre of the bowl, and proceeding along the stem vertically. *Height* $2\frac{1}{8}$ *in.* *Diameter* 6 *in.*

678. Tazza, having a shallow bowl, resting on a baluster stem, with a low bell-foot. The whole is completely covered with a handsome, irregular network pattern, composed of two sets of white threads, one thicker than the other, radiating spirally from the centre, with a minute twist, in reverse directions. *Height* $5\frac{1}{8}$ *in.* *Diameter* $7\frac{1}{4}$ *in.*

679. Low Tazza, similar in form to the preceding. The bowl is ornamented with twelve radiating bands of transparent red glass, bearing, alternately, an opaque red parallel stripe, and a spiral broad latticinio stripe; between each two red bands are two bands of latticinio zig-zag filigree and network; the foot is plain. *Height* $1\frac{3}{4}$ *in.* *Diameter* 7 *in.*

680. Large Low Tazza, or Dish, having a very wide margin, triply channelled at the rim, and sinking gracefully into a shallow well. Radiating from the surface to the rim are widely separated bands of handsome white spiral filigree, producing a very elegant effect. *Height* $2\frac{1}{2}$ *in.* *Diameter* $14\frac{1}{2}$ *in.*

4. With Reticelli Ornament.

In these examples the opaque white lines form a perfectly regular lattice pattern, at each intersection of which is enclosed an air bubble, usually more or less oval in form. The bubbles thus created generally produce a very ornamental accidental series of lines, parallel with one or the other set of the latticinio lines. See *Fig.* 213. The mode by which these and various other beautiful peculiarities were obtained Mr. Pellatt has attempted to explain in his "Curiosities of Glass Making," p. 113.

Fig. 212.

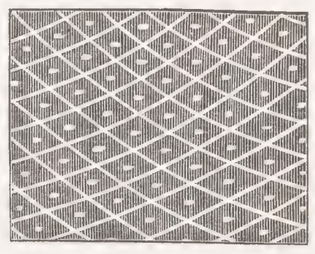


Fig. 215.

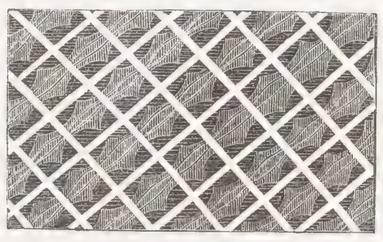


Fig. 213.

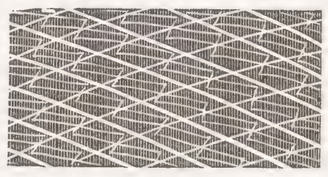


Fig. 214.

681. Goblet, having a long, oviform bowl, resting on a baluster stem, and covered with network, somewhat like *Fig.* 212. *Height* $7\frac{7}{8}$ *in.* (Debruge Coll.)

682. Goblet, with an oviform bowl, resting on a plain bulb, surmounting a baluster stem, and ornamented as the preceding; the bulb contains a half sequin of Francesco Molino, Doge of Venice in 1647. *Height* $7\frac{3}{4}$ *in.* (Bernal Coll.)

683. Goblet, with a funnel-shaped bowl and baluster stem. It is all covered with reticelli, except the stem, which has irregular network. *Height* $6\frac{1}{2}$ *in.*

Fig. 218.

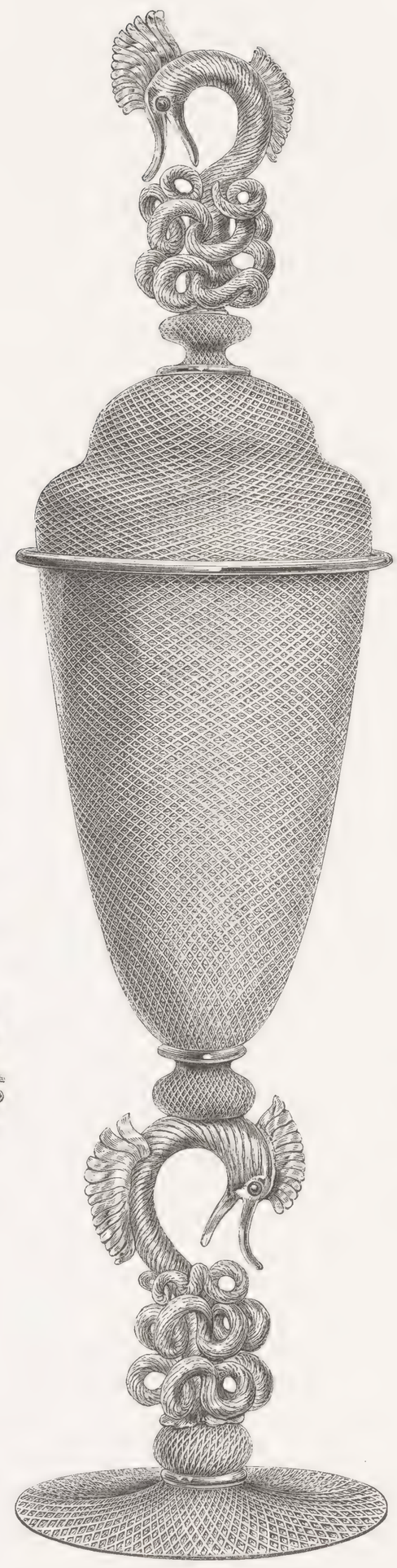


Fig. 217.

Fig. 216.

VENETIAN GLASS.

684. Tall covered Goblet, with a convoluted stem, in the form of a serpent, with blue eyes; the cover is surmounted with a similar decoration. Both body and cover are decorated with fine reticelli work, and the serpents with a spiral latticinio stripe, excepting on their mouths. *Height* $18\frac{1}{2}$ *in.* *Fig.* 217.

This fine goblet is similar in form and proportions to No. 494.

685. Cylindrical Goblet, resting on a compressed bulb and bell-foot. The whole is covered with reticelli, like *Fig.* 213, in the meshes of which the air bubbles assume a quatrefoil shape. *Height* 8 *in.*

686. Tankard, in form somewhat similar to *Fig.* 185, but having a straighter handle, and a conical cover-knob. The whole is ornamented with a very fine reticelli pattern, like *Fig.* 212, excepting the handle and knob, which are slightly decorated with bold twisted latticinio. *Height* 9 *in.*

687. Flacon, in form like *Fig.* 199, and covered with fine reticelli work, like *Fig.* 212, excepting on the wings and base rim. *Height* $6\frac{1}{2}$ *in.*

688. Small Vase, having an elegant oviform body tapering to a point at the base, a flattened shoulder, a long, slender, concaving neck, and resting on a low bell-foot. The whole is decorated as the preceding. *Height* $6\frac{5}{8}$ *in.*

689. Large Bottle, cylindrical, with a short small neck, and a metal cover. The body has six bold vertical channels extending from the shoulder to the base, and the whole is decorated as the preceding. *Height* $9\frac{1}{4}$ *in.*

690. Small cylindrical Bottle, having a broad, low neck, with a dome cover, surmounted with a bright indented knob. This is ornamented somewhat like *Fig.* 212, and has a very delicate appearance. *Height* $6\frac{1}{2}$ *in.* (Debruge Coll.)

691. Large scalloped Bowl, having twelve very large adjoining embayments, and resting on a low bell-foot. The whole is covered with bold and handsome reticelli work, very like *Fig.* 213. *Height* $5\frac{1}{8}$ *in.* *Diameter* $10\frac{1}{2}$ *in.*

692. Bowl, having a slightly tapering hemispherical body resting on a bulb and bell-foot. The whole is ornamented with thin latticinio reticelli, as in *Fig.* 214, which shows the peculiar bubble on the foot; the bubble on the bowl is of a more complete lozenge form. *Height* $4\frac{3}{4}$ *in.* *Diameter* 5 *in.*

693. Covered Bowl, with a shallow tazza stand having a low bell-foot. The form of the bowl is of an elegant ogee character, with a narrow horizontal lip; the cover is of a low dome form, surmounted with a bulb bearing an opaque, white and blue, spreading flower; two scroll handles, similar to those in *Fig.* 1, *Coloured Plate* XVI., are attached to the bulbous part of the vessel. The body and cover are ornamented with reticelli (*Fig.* 212), the regularity and delicacy of which, combined with the sparkle of the air-globules enclosed in its meshes, render this a peculiarly fine specimen. *Height of Bowl* $5\frac{1}{8}$ *in.* *Height of Tazza* $1\frac{1}{4}$ *in.*

694. Covered Bowl, similar in form to the preceding, but having a knob only to the cover, and no handles. The decoration is almost as perfect as that of the last-named. *Height* $5\frac{1}{4}$ *in.* *Diameter* $4\frac{1}{2}$ *in.*

695. Large Low Tazza, having a very shallow bowl resting on a broad bell stem, and covered with reticelli, like *Fig.* 213. *Height* 2 *in.* *Diameter* $9\frac{5}{8}$ *in.*

696. Low Tazza, similar in form to the preceding, but shallower. It is decorated with fine reticelli work of the character last described, radiating in spiral lines from the centre of the bowl, in a peculiarly striking manner. *Height* 2 *in.* *Diameter* $7\frac{1}{2}$ *in.*

697. Tazza, having a shallow bowl resting on a bulb and bell-foot. The bowl is covered with thin reticelli work, radiating spirally from the centre. *Height* $3\frac{1}{4}$ *in.* *Diameter* $6\frac{3}{4}$ *in.*

698. Tazza, with a deep bowl resting on a bulb and bell-foot. The bottom of the bowl exhibits another variety of this beautiful art, in which the threads do not cross each other at so acute an angle as usual, and the air is consequently forced into a small oval bubble (*Fig.* 215) in the centre of each mesh. *Height* $4\frac{3}{8}$ *in.* *Diameter* $7\frac{1}{4}$ *in.*

E. FROSTED OR CRACKLE GLASS.

This description of glass is produced by plunging a mass of newly blown plain glass suddenly into cold water, and then immediately re-heating it. The cold water produces an instantaneous contraction, assuming the form of multitudinous narrow ridges, and the re-heating process causes a separation of these ridges into irregular reticulations, enclosing within their meshes what may be termed frost work.

Fig. 219.

699. Small Ewer, with a trefoil mouth, and pinched handle. The body is frosted, and encircled with a raised indented clear glass belt; above the latter are two latticinio belts enclosing blue threads. *Height* $3\frac{1}{4}$ *in.* (Bernal Coll.) *Fig.* 219.

700. Large Beaker, of cylindrical form, tapering slightly downwards, and curving outwards a little at the mouth. The surface of this handsome specimen is frosted; the body is ornamented half-way up with three large gilt medallions of lions' heads, with intermediate turquoise bosses. *Height* $8\frac{1}{4}$ *in.* (Bernal Coll.)

701. Windmill Goblet; consisting of the inverted oviform bowl of a goblet, the foot of which has been replaced by a silver windmill; at the back of the latter is a long blow-tube, leading up into the body of the mill, and evidently intended to set the sails in motion. The bowl is frosted and diamond moulded to within an inch of the margin; four belts of latticinio stripes, bordering intertwined threads of latticinio and blue glass, encircle the frosted work, and divide it into four compartments alternately semé d'or. *Height of the Goblet* 4 *in.* (Sandes Coll.)

It is probable that this glass was used as a pledge, and that the person receiving it had to empty it before the sails of the windmill ceased going round after having been set in motion by blowing through the tube.

702. Tazza Wine Glass, having a graceful bowl sinking at the centre into a narrow oviform cup, whence the margin expands as a flower from its calix; the stem is spirally twisted. *Height* 6 *in.* *Diameter* 5 *in.* *Fig.* 220.

703. Tazza Wine Glass, a companion to the preceding.

Fig. 220.

Fig. 221.

704. Large Wine Glass; having a frosted bowl scalloped into six compartments, resting on a ribbed bulb and plain baluster stem, flanked by small blue and clear glass wings. *Height* $6\frac{1}{4}$ *in.* *Fig.* 221.

705. Tall Double Tazza, having a frosted shallow bowl, from the centre of which rises a small plain cup; the stem is spirally twisted. *Height* 8 *in.* *Diameter* $8\frac{1}{4}$ *in.* (Debruge Coll.) *Fig.* 222.

706. Covered large Goblet Vase; the bowl is surrounded at the base with bold projecting bossed ribs, and rests on a handsome fluted stem and foot. The cover is surmounted by a delicately ribbed serpentine figure. Rising from the centre of the interior of the bowl is a large hollow ball of frosted glass containing a pebble. *Height* $13\frac{1}{2}$ *in.* *Fig.* 218. *Plate n.*

707. Large Goblet Vase; having an elegant bowl resting on a ribbed foot and baluster stem. The lower half of the bowl is frosted and encircled with two handsome belts of latticinio filigree, each bearing three gilt strawberry bosses. *Height* $7\frac{7}{8}$ *in.* *Fig.* 223.

708. Large Goblet Vase; having a very handsome thistle-shaped bowl; the globular half is surmounted with a raised double shoulder belt of frosted work, beneath which the whole surface is frosted; the stem is ornamented with a fine boss of lions' heads, gilt. *Height* $9\frac{7}{8}$ *in.* *Fig.* 224.

709. Goblet Vase, with a frosted dome cover; the body and stem are altogether very similar to *Fig.* 224, but less bold in form, and the stem is gilt. *Height* $10\frac{1}{2}$ *in.*

710. Sceau or Pail, octagonal, with a moveable ribbed handle working in loops of clear glass. The surface is ornamented with embossed belts, having large diamond forms between them, and is entirely frosted, excepting on the margin, and the rim encircling the base. *Height* $6\frac{1}{2}$ *in.* *Fig.* 225.

711. Cup, bell-shaped, with a blue edge to the lip; two scroll handles, crested and denticulated, are attached to the body. The whole is frosted excepting the base rim. *Height* $3\frac{3}{8}$ *in.*

712. Small Bowl; having the body somewhat similar in form to that of *Fig.* 223, but flatter at the base, and entirely frosted; it rests on a clear glass rim, and has two scroll handles attached to the bulb. *Height* $2\frac{1}{8}$ *in.*

713. Hexagonal Bottle, rounded slightly at the base and shoulder; it has a low funnel-shaped neck. Down each angle of the body is a projecting frill, with denticulations, and terminating in short grape-like feet, which support the body. The neck has a blue lip, and is encircled by a blue zig-zag fillet. *Height* $6\frac{1}{2}$ *in.* (Debruge Coll.)

The glass melon described under No. 751 displays also an interesting example of frost decoration used as an outer coating over colour.

PLATE

Fig. 223.

Fig. 218.

Fig. 224.

Fig. 225.

VENETIAN GLASS.

F. COLOURED GLASS.

1. Of Single Colours.

Fig. 226.

714. Mounted Vase, of a brilliant emerald colour. This elegant specimen of the 16th century is fluted down the neck and shoulder; the setting is of old gilt metal work. *Height* $9\frac{3}{8}$ *in.* *Fig.* 226.

715. Mounted Vase, the companion to the preceding.

716. Large green Tazza, with a low upright edge, and a broad columnar stem expanding towards the base. *Height* $2\frac{7}{8}$ *in.* *Diameter* $9\frac{3}{4}$ *in.*

717. Green Tazza, of beautiful proportions; the plate of the bowl, below the plain margin, is ornamented with a series of encircling raised threads, intersected with delicate ribbings, radiating from the centre, and producing an elegant wavy effect, somewhat like basket-work. The stem is formed of a pear-shaped boss ornamented with lions' heads, and rests on a nearly flat foot. *Height* $5\frac{1}{4}$ *in.* *Diameter* 6 *in.*

718. Tall green Wine Glass; with an elegant elongated oviform bowl, resting on a ribbed colourless stem, having denticulated wings, etc., and resembling in form that of *Fig.* 92. *Height* $5\frac{7}{8}$ *in.*

719. Green Wine Glass; funnel-shaped, with a spirally twisted convoluted stem, similar to that of *Fig.* 175, without the wings, and terminating at the summit with strawberry bosses. *Height* $6\frac{1}{8}$ *in.*

720. Small green Bowl, of a rich deep hue, with four indentations round the margin, giving the mouth a scalloped form; immediately beneath the lip is a broad stripe of opaque white glass, and of this material is the low foot-ring on which the bowl rests. *Height* $2\frac{3}{8}$ *in.* *Diameter* 4 *in.* (Bernal Coll.)

721. Small dark green Bowl, of ogee form, ribbed, and having two side scroll handles. *Height* $1\frac{3}{4}$ *in.* *Diameter* $2\frac{3}{4}$ *in.*

722. Large Bowl or Pail, made of transparent blue glass, showing externally a green hue, from its having a coating of yellow enamel on its inner surface. It has a moveable twisted handle, and sockets of clear glass, attached to the mouth; below this the form is ogee, ornamented on the convex part with two serrated clear glass fillets bearing pear-shaped medallions with gilt lions' heads; a narrow ring of colourless glass supports the body. *Height* 5 *in.* *Diameter* $7\frac{3}{4}$ *in.*

723. Large blue Pail, tapering downwards; it is ornamented with six wavy bands of opaque white glass, and has a moveable handle of twisted glass fastened to sockets. *Height* $10\frac{1}{2}$ *in.* *Diameter* 9 *in.*

724. Small mounted Vase, of blue with a greenish hue; it is of a flattened pear-shape and fluted. The mounting is of gilt metal, perforated, and has two scroll handles. *Height* $5\frac{3}{8}$ *in.*

725. Small mounted Vase, the companion to the preceding.

726. Small blue Vase, having a light greenish hue. The neck is fluted, and encircled with a zig-zag fillet, and the general form resembles *Fig.* 157, without the handles and tubes. *Height* 5 *in.*

727. Small dark blue Vase, similar in form to *Fig.* 1, *Coloured Plate* XIX. *Height* $3\frac{3}{4}$ *in.*

728. Small dark blue Vase, like the preceding, but more boldly ribbed, and having light amber instead of blue coloured handles. *Height* $3\frac{7}{8}$ *in.*

729. Small dark blue Vase, ribbed throughout, and somewhat similar in form to *Fig.* 1, *Coloured Plate* XIX., but having a narrower and more tapering body, and a longer neck in proportion. The rim and handles are of amber glass. *Height* $3\frac{3}{8}$ *in.*

730. Small dark blue Jug, ornamented with a series of raised white threads, encircling an expanding scalloped mouth, beneath which is a vertically ribbed, long, cylindrical neck, and bulbous body, with a flat base. A curved handle is attached to the neck by a plain fillet. *Height* $4\frac{1}{4}$ *in.*

731. Small grey blue Jug, having a pear-shaped body, with a cylindrical neck, and a curved side handle. *Height* $2\frac{3}{4}$ *in.*

732. Small speckled blue Bottle, with a very long neck, cylindrical, curved at the mouth, and descending into an expanding narrow body flattened at the base. This has been splashed with white and crimson opaque glass, so as to produce minute raised specks upon the surface. *Height* 4 *in.*

PLATE I.

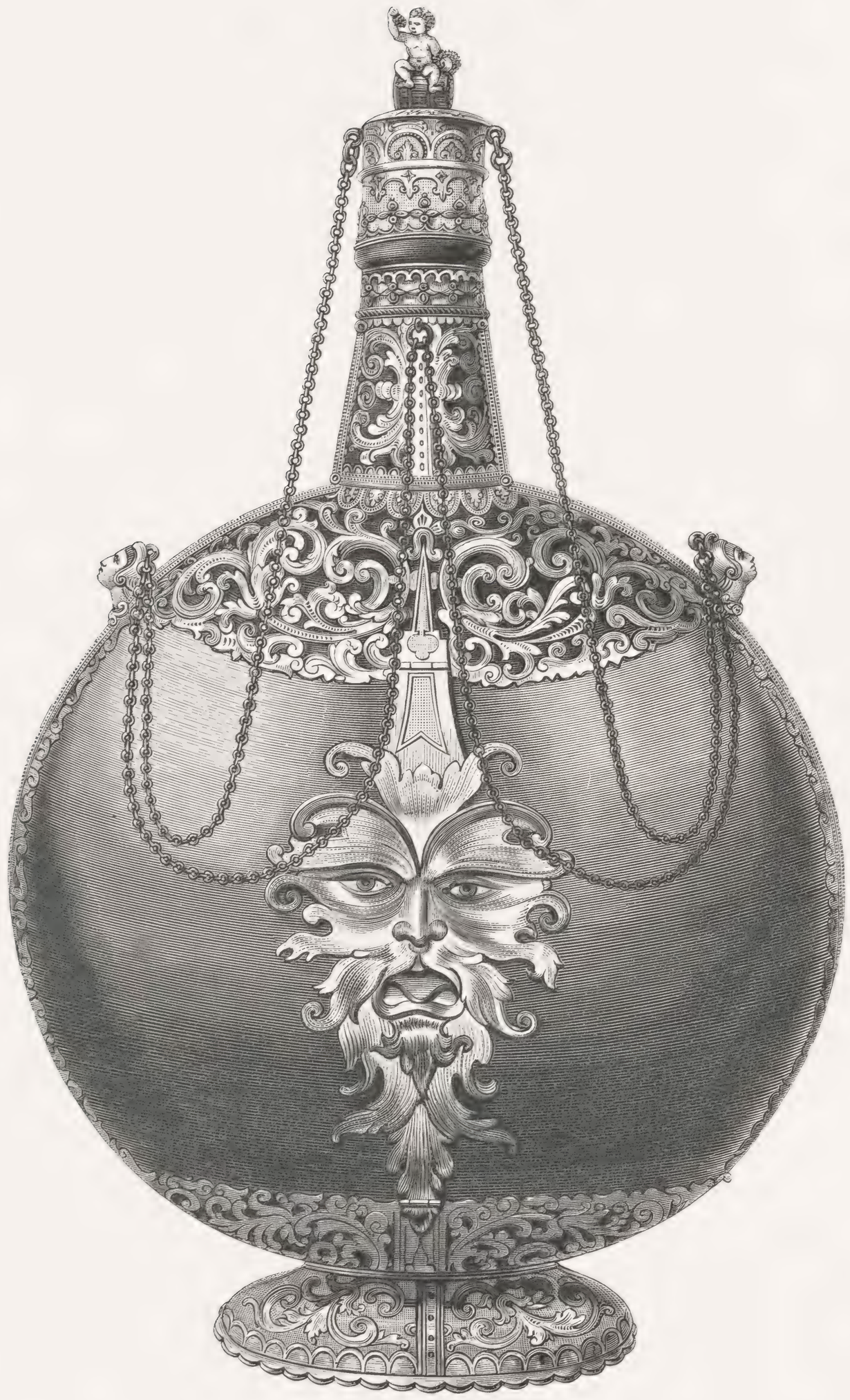


Fig. 227.

VENETIAN GLASS.

733. Small blue Bottle, with a bold pinched handle attached to a long, narrow, cylindrical neck, which descends into a spherical body, ornamented with ribs forming a festooning and diamond-shaped moulding. *Height* $5\frac{1}{4}$ *in.*

734. Small dark blue Bottle; gourd-shaped, and ornamented with a partially zig-zag spiral line of opaque white glass, running from the neck to the base. *Height* $3\frac{1}{4}$ *in.*

735. Small blue Bowl, of violet hue, hemispherical in form; ornamented with etched flowers, and having an opaque white rim, clear glass scroll handles, and a clear glass base rim. *Height* $2\frac{3}{8}$ *in.* *Diameter* $4\frac{1}{2}$ *in.*

736. Small dark blue Barrel; encircled with a series of raised white threads, and having a short neck with bossed handles, etc. *Height* $3\frac{1}{4}$ *in.* *Length* 5 *in.*

737. Small dark blue Lamp, in form resembling *Fig.* 187. *Height* $3\frac{1}{2}$ *in.*

738. Dark blue French Horn; having a spiral thread of clear glass passing round the convoluted tube, and a zig-zag colourless fillet encircling the neck. *Length* 8 *in.*

739. Small blue Bowl, with clear glass margin, and small twisted side handles. The blue glass is bossed, and the margin encircled with a series of raised brown threads. *Height* $2\frac{1}{2}$ *in.* *Diameter* $5\frac{3}{8}$ *in.*

740. Large puce Goblet; having a very elongated oviform bowl, and a low dome cover, both ornamented with intersecting diagonal ribs forming a bold diamond pattern. The cover is surmounted with a series of clear glass bulbs, and the body rests on a short baluster stem of clear glass, and ribbed like that of *Fig.* 139. *Height* $12\frac{1}{2}$ *in.*

741. Small puce Bowl; bell-shaped and ornamented with intersecting diagonal ribbings forming a diamond pattern. *Height* $1\frac{3}{8}$ *in.* *Diameter* $4\frac{1}{4}$ *in.*

742. Large ruby Pilgrim's Bottle, of very brilliant and refined hue—the material of which this handsome vessel is composed being also extremely thin, and light in weight. The body is set in a peculiarly elegant and elaborate silver gilt *cinque cento* mounting, perforated and richly chased, attached to which are chains and masks, etc. *Height* 13 *in.* *Fig.* 227.

743. Bottle, of old ruby glass; somewhat like *Fig.* 89 in form, but having vertical flutings, widening downwards, and forming raised ribs, encircled at the shoulder-point with a raised serrated belt. It has a stopper surmounted with three helmeted heads, and a chased spreading foot, both of which are of silver gilt. *Height* $9\frac{3}{4}$ *in.* (Lady Blessington's Coll.)

744. Bottle, of old ruby glass; smaller than the preceding, but having a plain gilt stopper, and a gilt gadroon-patterned spreading foot. *Height* 7 *in.* (Lady Blessington's Coll.)

745. Bottle, the companion to the preceding.

746. Dark purple Bottle, of a flattened pear-shape with a short neck, and ornamented with bold diamond mouldings. *Height* 5 *in.*

747. Deep purple Cup, almost black and opaque in appearance, and semé d'or; the body slightly tapers downwards. *Height* $2\frac{1}{2}$ *in.*

748. Puce Goblet; boat-shaped, with an outward curving clear glass margin, and clear glass baluster stem. *Height* $4\frac{5}{8}$ *in.*

749. Amber brown Basin, hemispherical, having two pinched handles, and a base rim of clear glass. *Height* $1\frac{7}{8}$ *in.* *Diameter* $3\frac{7}{8}$ *in.*

750. Amber brown Basin, the companion to the preceding.

751. Melon, of semi-transparent yellow glass streaked with green and covered with a glaze of frosted clear glass so as to impart to it the appearance of the "lace melon." This is a very fine and natural-looking specimen. *Height* 3 *in.*

752. Citron, of bright opaque yellow glass, with a coating of clear glass; attached to the object is a white blossom, having a stalk and leaves of opaque green glass. *Length* 6 *in.*

753. Seed Pod or Bean, of bright opaque green glass; attached to the stalk is a blossom with white petals and yellow stamens. *Length* 7 *in.*

754. Pipe Stem, of dark blue glass, twisted and ornamented with an opaque white and an opaque red thread spirally intertwined. *Length* 26 *in.*

755. Walking Stick, of dull red glass, lined with opaque white. *Length* 27 *in.*

756. Purple brown Bouquetier, of fanciful form; with a dome-shaped body, resting on a flat base, and rising into a long, twisted, and compressed or partially flattened tube, curving forwards at the upper end and having a white lip. *Height* $10\frac{3}{4}$ *in.*

757. Amber Cup, of greenish hue, having an ogee bowl with an opaque white lip, and vertically ribbed; two scroll handles are attached to the globular end. *Height* $2\frac{5}{8}$ *in.*

2. Lattimo or Opaque White Glass.

Fig. 228.

758. Small quaint Salt Cellar, of opaque white glass in the form of a scallop shell; it is supported on three feet, and has two scroll handles; on the hinge of the shell is a coiled serpentine handle. *Length* 5 *in.* *Height* $3\frac{1}{8}$ *in.* *Fig.* 228. (Cadogan Coll.)

759. Small Bowl, of opaque white glass, ogee in form, having a dome cover,

and two scroll side handles; the whole is ornamented with bold and thin irregular zig-zag trails of dull opaque red glass. *Height* $4\frac{1}{4}$ *in.* *Diameter* $3\frac{1}{2}$ *in.*

760. Vase, of opaque white glass; having a depressed balloon-shaped body, with a long, concaving, broad neck, encircled with a wavy fillet connecting two scroll handles which spring from the shoulder of the body; irregular zig-zag trails of opaque dark blue glass are dispersed over the vessel. *Height* $6\frac{1}{8}$ *in.*

761. Tall Wine Glass, of opaque white glass, very similar in form to *Fig.* 162. *Height* $6\frac{1}{4}$ *in.*

3. Opalized.

Fig. 229.

762. Two-handled Vase, of opal glass; having the neck, shoulder, stem, bulb, and foot vertically ribbed; the scroll handles are denticulated, and on each side is a medallion bearing gilt lions' heads. *Height* 8 *in.* *Fig.* 229.

763. Tankard, of opal glass; in form very similar to *Fig.* 2, *Coloured Plate* XIX.; the lower part and the low dome cover are ornamented with a large gadroon pattern. A denticulated metal rim encircles the cover and is attached by a hinge to the top of the handle. *Height* $7\frac{1}{8}$ *in.*

764. Burette of opal glass; vertically ribbed, and similar in form to *Fig.* 142, but the handle is ornamented with delicate denticulations. *Height* $7\frac{1}{4}$ *in.*

765. Burette, of opal glass; similar in form to *Fig.* 1, *Coloured Plate* XVII., but more tapering, and without medallions; the whole is vertically ribbed, and the handle is ornamented with small and regular denticulations and has a shell base. *Height* $4\frac{3}{4}$ *in.*

766. Low opal Tazza, belonging to the preceding, ornamented with slightly

raised ribs, forming a series of angular points round the edge, and standing on a low bell-foot. *Height* $1\frac{1}{4}$ *in.* *Diameter* 6 *in.*

767. Small opal Burette; diagonally ribbed; at the base of the spout of this elegant little vessel is a handsome pear-shaped medallion bearing a gilt lion's head; two similar medallions flanked with raised pellets lie between the spout and the handle, and a shell form terminates the latter. *Height* $3\frac{1}{4}$ *in.* (Debruge Coll.) *Coloured Plate* XVII. *Fig.* 1.

768. Small opal Burette; similar to the preceding. *Height* $3\frac{1}{2}$ *in.*

769. Tall opal Goblet; having a diamond moulded bowl, supported on a handsome stem, the upper part of which is composed of two crested serpents, and flanked by serrated wings of a very elegant character. This beautiful goblet exhibits a combination of opalescent hues of the greatest brilliancy and delicacy. *Height* $11\frac{1}{2}$ *in.* (Earl of Cadogan's Coll.) *Coloured Plate* XVII. *Fig.* 2.

770. Opal Bottle, ornamented with large flakes of gold, intermingled with birds and scrolls painted on the surface in opaque white. *Height* $4\frac{1}{2}$ *in.*

771. Low opal Tazza; having a red lipped shallow bowl depressed into slight hollows, with intermediate ridges radiating from the centre; the foot is bell-shaped. *Height* $1\frac{3}{4}$ *in.* *Diameter* 7 *in.*

772. Small opal Bowl, ogee in form, having vertical ribbings, and two gilt masks with intermediate bosses on the lower or projecting part; the foot rim is of clear glass. For clearness and delicate brilliancy this specimen probably cannot be surpassed. *Height* $2\frac{5}{8}$ *in.* *Diameter* $3\frac{3}{4}$ *in.*

773. Low opal Tazza, belonging to the preceding, and having a series of ribs, radiating from the centre, which form angular points round the margin; it is supported on a low ribbed bell-foot. *Height* $1\frac{1}{4}$ *in.* *Diameter* 7 *in.*

774. Small Cup, of thin opaque opal glass; having a cylindrical bowl, curving slightly outwards at the lip, and supported on three strawberry bosses. The body is ornamented with a stag hunt, painted in bistre colours; the figures are represented in the costume of the middle of the seventeenth century. The decoration, and possibly the glass also, may be German. *Height* $2\frac{5}{8}$ *in.*

G. VARIEGATED GLASS.

1. Marbled and Splashed.

775. Scent Bottle, of dark blue glass marbled with opaque white; it is of a cornucopia form, having a short neck, and ornamented with strawberry bosses and a denticulated fringe all in blue. *Height* 3 *in.*

776. Small milk white Jug, veined with blue and purple; it has a spherical body with a broad neck, to which a scroll handle is attached. *Height* $3\frac{7}{8}$ *in.*

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777. Small Vase, of milk white glass veined with light blue; it is of elegant form, with a broad neck, from which descend two handles of opal glass with denticulations. *Height* $5\frac{1}{2}$ *in.*

778. Small Vase, a companion to the preceding.

Fig. 230.

779. Quaint Vase, entirely formed of opaque white glass; it stands on three feet, and has a cylindrical body, mottled and veined with blue, red, yellow, and green streaks; round it are two crinkled belts connecting three scroll wings. A small stopper fits into the mouth; surmounting this is an elegant vertical ornament with four denticulated wings, terminating in a spirally twisted point, and possibly intended as a ring holder, as this vessel appears to have been made for toilet purposes. *Height* $8\frac{1}{2}$ *in.* *Fig.* 230.

780. Small spotted Jug, of opaque grey glass, sprinkled with blood red streaks, intermingled with a few blue spots. The body is of a compressed spherical form, with a curved pinched handle, and a broad neck, expanding at its summit into an overhanging mouth compressed inwards so as to form a spout. *Height* $4\frac{5}{8}$ *in.*

781. Toy Jug, of pale greyish semi-transparent glass, very thin, and marbled with small streaks and spots of red and pale blue profusely intermingled. The form is quaint, and it has a delicate pinched handle. *Height* $1\frac{3}{4}$ *in.*

782. Small Burette, of blue glass, speckled and veined with white, red, and yellow. The body of this quaint looking vessel rises from an expanding base rim

into a spherical form; above this is a very long, narrow, cylindrical neck, encircled with a wavy fillet from which a blue handle springs; a curved blue spout starts from a gilt strawberry boss. The neck has a silver cap-like stopper attached to chains. *Height* 5 *in.*

Fig. 231.

783. Small Burette, of rich violet glass sprinkled with opaque white spots, and having the handle, spout, and neck-fillet all of opaque white glass. *Height* $5\frac{1}{4}$ *in.* *Fig.* 231.

784. Cup or small Bowl, of very thin semi-transparent milky white glass, sprinkled with red and blue; it is ribbed and has two opaque white pinched scroll handles. *Height* $1\frac{3}{4}$ *in.*

785. Vase, of opaque white glass, decorated with splashes of blue and red, occasionally intermingled with spots of bright yellow and pale apple green. In form it is like the body of *Fig.* 165, but it has a flat base and two opaque white pinched scroll handles. *Height* $3\frac{1}{8}$ *in.*

786. Cup, of milky white semi-transparent glass, decorated with streaks and spots of blue and red, intermingled with metallic splashes. It has a quaint form, the lower half being cylindrical, and the upper half hemispherical. Round the former are several opaque white strawberry bosses arranged in triangles. The margin is cased in old silver. *Height* 3 *in.*

787. Cup, a companion to the preceding.

788. Small covered Vase, of milk white glass, splashed with dark and light blue, red, and avanturine. The body has a shape somewhat similar to the preceding, and is surmounted with a dome cover with a projecting rim; two

opaque white serrated scroll handles are attached to the body, and one, of a similar material, rises like a triangle from the cover. *Height* $5\frac{1}{2}$ *in.*

789. Cup, of semi-transparent white glass, richly ornamented, to within an half an inch of the margin, with large irregular spots or splashes of blue, reddish brown, and avanturine. It is bell-shaped, slightly ribbed, and has curved pinched side handles. *Height* $2\frac{1}{8}$ *in.* *Diameter* 4 *in.*

790. Cup, of extremely thin milk white glass, similar in form and decoration to the preceding, but sprinkled all over with splashings of blue and dark red. *Height* $1\frac{3}{8}$ *in.* *Diameter* $2\frac{3}{4}$ *in.*

791. Shallow Cup, of rich violet glass sprinkled with large oval white spots; it has a violet foot rim and scroll handles of opaque white glass. *Height* $1\frac{3}{4}$ *in.* *Diameter* $3\frac{5}{8}$ *in.*

792. Barrel Vase, of dark blue glass, splashed with opaque white, red, and light blue; it has a central neck with bossed loops, and two contiguous bosses, all blue. *Height* $3\frac{1}{4}$ *in.* *Length* 5 *in.*

793. Scent Bottle, of dark blue glass, sprinkled with opaque white and red spots; it has a globular body with two blue denticulated bands or frills at the sides, and tapers into a bulbed neck. *Height* $3\frac{1}{8}$ *in.*

794. Cup, of rich greenish amber glass; having an elongated bell-shaped bowl ornamented with groups of large opaque oval spots of light red, deep ruby, and dark blue. *Height* $3\frac{5}{8}$ *in.*

795. Scent Bottle, of dark blue glass, covered entirely with large opaque dull red spots, and smaller white spots intermingled with veins of the blue ground. It is of a flattened pear-shaped form. *Height* $3\frac{1}{4}$ *in.*

2. Millefiori.

This decoration is produced after the manner of mosaic work. Parti-coloured devices are first formed, by arranging canes of glass of different suitable thicknesses and colours, and fusing them together; they are then drawn out into rods, sectional cuttings of which are cast into molten clear glass, and this is finally heated again and blown, or otherwise manipulated, into the required shapes.

796. Goblet, having an elegant funnel-shaped body resting on a compressed bulb and bell-foot, and ribbed throughout. The colours in the embedded devices are similar to those in *Fig.* 2, *Coloured Plate* XVIII., but more varied with brown, and intermingled with gold sprinklings. *Height* $7\frac{1}{8}$ *in.*

797. Vase, somewhat like an hour glass in form, but larger at the lower than the upper end, and ribbed throughout. The pattern embedded in its surface is very similar in all respects to that of *Fig.* 2, *Coloured Plate* XVIII. *Height* $4\frac{5}{8}$ *in.*

798. Compressed Cup, tapering slightly downwards, and vertically channelled so as to form a series of sharp ridges. The decoration consists of a number of sections of canes with cruciform and star-like patterns on a light blue and reddish purple ground; the spaces between these are filled with irregular bands of lace

glass or network, white and golden hued, and across them are narrow bands of bright red glass; the whole forming a brilliant and elegant pattern. *Height* $3\frac{3}{8}$ *in.*

799. Small mounted Vase or Ewer, of a quaint form, elegantly decorated and boldly ribbed; it is enclosed in an old mounting of silver gilt and of good work. *Height* $4\frac{3}{4}$ *in. Coloured Plate* XVIII. *Fig.* 2. (Debruge and Soltykoff Coll.)

800. Small mounted Vase, a companion to the preceding.

801. Bottle, of brilliant blue glass; having a globular body boldly ribbed and surmounted with a small narrow neck. The decoration is similar to that of the preceding, but has a richer appearance from being embedded in blue glass and profusely sprinkled with gold. *Height* 4 *in.*

802. Cylinder, formed of deep blue glass fused to a copper tube. The embedded devices which it displays, are remarkable for their distinctness and diversity of form. The spaces between the millefiori ornaments are filled with serpentine patterns of different coloured lace glass intricately intermingled. Among them are several skulls. *Length* 7 *in. Diameter* $1\frac{1}{4}$ *in.*

803. Bead, of semi-opaque light blue glass, ornamented with blue and reddish purple devices, relieved by white threads. *Diameter* $\frac{7}{8}$ *in.*

804. Small Bead, of opaque greenish yellow glass, ornamented with zig-zags of red, light blue, and white. *Diameter* $\frac{1}{2}$ *in.*

805. Globular Ball, composed of sections of canes of various patterns and colours, some of them simple twists, others complicated designs; the outer surface is of clear glass. *Diameter* $2\frac{1}{4}$ *in.*

806. Egg-shaped Ball, composed of sections of canes, principally spiral twists of various colours, but less elaborate than the last, and with avanturine. *Diameter* $2\frac{1}{4}$ *in.*

807. Gourd-shaped Scent Bottle, of plain glass, sprinkled with sections of canes, chiefly of simple opaque colours very diversified. *Height* 2 *in.*

808. Scent Bottle, a companion to the preceding.

809. Toy Vase, of blue glass, sprinkled with sections of canes of a simple pattern in white and brown; it is bell-shaped, and has two scroll handles, and a foot of amber glass. *Height* 2 *in.*

3. Chalcedony and Avanturine Schmelz.

Three receipts are given in Neri's "Art of Glass," for the manufacture of chalcedony glass, which from his description seems to have been of the kind here described.

810. Large Ewer, of chalcedony schmelz, yellowish brown, violet, and green. It rises from a bell stem into a slightly ogee hemispherical body, concaving from its shoulder into a neck with a wide mouth, over which is a low convex cover; and has a curved spout and side handle. *Height* $11\frac{1}{2}$ *in.*

811. Large Vase, of chalcedony schmelz of a deep purplish hue. The body is of a bold oviform shape with a short re-curving neck. *Height* $8\frac{3}{4}$ *in.*

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812. Bottle, of chalcedony schmelz, externally variegated with brown, green, and blue. It has a fluted square body with a semicircular projection on each face, and a short re-curving neck. *Height* 6 *in.*

813. Bottle, of chalcedony schmelz, a companion to the preceding.

814. Cup, of chalcedony schmelz, of an elongated bell shape. *Height* $3\frac{1}{2}$ *in.*

815. Covered Tankard, of chalcedony with avanturine spots. The body is moulded into slightly defined facets. *Height* $7\frac{1}{4}$ *in.* *Coloured Plate* XIX. *Fig.* 2.

816. Small Cup and Saucer of a similar material and decoration to the above specimen, with a bluish green inner surface. The cup inclines to a bell form, and is ribbed; the saucer is plain with a vertically moulded surface. *Height* $2\frac{1}{4}$ *in.*

817. Small Cup and Saucer, of similar material to the preceding; the cup is hemispherical. *Height* 2 *in.*

818. Small Cup, hemispherical; of similar material to the preceding, but very thin in substance, and having the unusual feature of an iris encircling the middle of the interior. *Height* $1\frac{3}{4}$ *in.*

819. Cup and Saucer, of chalcedony glass richly variegated with serpentine veins of yellow, blue, and green colours, combined with oval splashes of avanturine. The cup is of an elongated bell shape and fits into a deep depression in the saucer. *Height of cup*, $3\frac{1}{2}$ *in.*; *Diameter of saucer*, $4\frac{7}{8}$ *in.*

820. Basin, inclining to a broad, low, bell shape, and having its surface moulded into facets; similar in material to the preceding, and mounted with elegant ormolu handles and base rim. *Height* $2\frac{1}{4}$ *in.* *Diameter* $4\frac{7}{8}$ *in.*

821. Large Tazza, resting on a ring base; in material and decoration similar to the preceding, and very rich in colour. *Height* $1\frac{5}{8}$ *in.* *Diameter* $9\frac{1}{2}$ *in.*

822. Mounted Casket, oblong in form, with a low pyramidal cover flattened at the top; it is composed of slabs of a rich, opaque, cobalt blue glass, brilliantly variegated with bold serpentine veins of avanturine. The mounting is in ormolu, of an elegant pattern, stamped with festoons, and terminating in four claw feet. *Height* $4\frac{1}{4}$ *in.* *Length* $4\frac{1}{8}$ *in.*

This casket is peculiarly interesting from the fact that the material of which it is composed is rarely met with elsewhere than in India, where it is highly prized, and used for brooches and other trinkets much valued by the natives. It has been therefore suggested, that the glass of which the casket is formed is of Indian or Eastern manufacture, though its setting is European.

823. Fragment of a Saucer, of brilliant dark blue glass, variegated with avanturine. *Length* $3\frac{1}{4}$ *in.*

VI.—FRENCH AND SPANISH GLASS.

Fig. 232.

824. Goblet of horny glass, enamelled and gilt; the bowl is funnel-shaped with a flat base, resting on a bulbed stem and a conical foot. The bowl is divided into three compartments; in one of them is represented a gentleman in the costume of the period, with blue hose, a slashed red doublet, and puffed breeches; he has a sword and a blue hat with a feather, and holds some red flowers; before him is a white scroll inscribed IE SVIS A VOVS. In the next compartment is a lady, also in costume; she holds a heart, surmounted apparently by an orb; on a scroll in front of her is inscribed MŌ CVEVR AVES. In the third compartment is painted a white goat, attempting to drink out of a narrow-necked vase, forming together the rebus *Bouc eau.* Above the compartments is a gilt band with pearled edging, in which the following inscription has been scratched away before burning, IE. SVIS. A VOVS. IEHAN. BOVCAV. ET. ANTOYNETE. BOVC., the space not admitting of the completion of the second name. On the exterior of the base of the bowl are enamelled stiff white scrolls. *Height* $6\frac{1}{4}$ *in.* *Diameter* $5\frac{3}{8}$ *in.* *Coloured Plate* XX. and *Fig.* 232.

This remarkable vase differs, as will be seen, in its outline and decoration from Venetian specimens of the same period. A family of Boucault existed in Provence. A few other goblets of the same form have been preserved; one of these is noticed by M. Benjamin Fillon, *L'Art de Terre chez les Poitevins*, p. 206, and was made for the family of Pineau, of La Rochelle. Another belongs to M. Davilliers, and represents a bust of a lady in profile, with a shield of arms, and a label inscribed SVR TOVTE COHVSE (*sur toute chose*) A third is in the Museum at Poitiers, but with the inscription in relief, VOVS SAVEZ BIEN QVE IE SEAP TOVT.

825. Octagonal Cup of opaque white glass, with a foot-rim, and decorated in enamel, chiefly red; the designs consist of a bird on a branch, stiff scrolls, and the inscription, *Je Fais du Bien a Tous*, 1723. *Height* $3\frac{1}{2}$ *in.*

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826. Statuette of glass or enamel, on a copper foundation; it represents a king, probably Louis XIV., in Roman armour, with a wig and sceptre, and a trailing mantle, all executed in brilliant colours. *Height* $4\frac{1}{4}$ *in.*

827. Similar Statuette representing the Apostle St. James the Great He is represented in a green dress, over which is thrown a yellow robe, and a black tippet with pilgrim's staves and escallops; in his right hand is a pilgrim's staff with a beaded head; on the right wrist a cockade made of glass; in his left hand a circular shield-like ornament of glass beads set in silver. On his head is a black cocked hat with escallops. *Height* $3\frac{7}{8}$ in.

828. Statuette of opaque white glass, on a copper foundation; it represents a man with a long beard and a pointed hat, and holding both his hands in a muff. *Height 5 in.*

The pedestal is of Dresden porcelain. *Height* $2\frac{3}{4}$ *in.*

829. Tazza of clear glass, with a bowl of a very open conical form, and a baluster stem. The bowl is very carefully engraved in an arabesque pattern, intermingled with filaments, which terminate in clear spots; a similar decoration may be observed on the foot and bulb of stem. *Height* $6\frac{1}{2}$ *in.* *Diameter* $7\frac{1}{4}$ *in.*

This specimen was exhibited in the International Exhibition of 1862, held in London, by M. Maës, and made at the glass-works of Clichy-la-Garenne (Seine). It was selected as one of the best examples of engraving on glass in the Exhibition, and this must be the excuse for introducing so modern a specimen into this catalogue.

830. A Tumbler of Spanish glass, with enamelled decorations, consisting of the arms of Spain, with branches at the sides, and the inscription VIVA EL REY DE ESPANA. The arms show it to be of the reign of one of the Bourbon line. The execution is coarse. *Height* $3\frac{7}{8}$ *in.*

This specimen may have been produced at Mataro in Catalonia, not far from Barcelona, where glass was made, as appears from a passage in "Le Soldat Parvenu" (Dresden, 1753), Tome I., p. 298, "lieu fameux en Espagne par les belles verreries qu'on y fabrique."

VII.—GERMAN GLASS.

A. With Enamelled Decoration.

In this class the decorations are executed in vivid opaque enamels not intended to be viewed by transmitted light, but which are generally very effective in appearance. The details of the marginal borders are often executed in gilding burnt in on the surface, and are of a similar character to those shown in *Coloured Plates* XXI. and XXII.

Fig. 233.

Fig. 234.

831. Cup, of quaint form, with a singular ribbed handle. The bowl is ornamented with four enamelled shields, viz., 1. gu. a bifid plant ar. growing out of three hillocks or; 2. or a sceptre head in bend sa.; 3. gu. a greyhound's head couped ar. collared sa. ringed or; 4. gu. a demi bull ar. horned and hoofed or. These are respectively like the coats of Söllen, Reichen, Gerhan von Kepla, and Störtzing, but they cannot with any certainty be attributed to those families. The bowl has a gilt, imbricated, and pearled marginal border, and the prominent portions of the ribs have been gilt. Early sixteenth century. *Height* $6\frac{1}{8}$ *in.* *Fig.* 233.

832. Jug, with enamel work, representing white dogs pursuing a red stag and a fox; it is dated 1595. Round the neck are red, blue, green, and white spots within a yellow trellis. The lid is of pewter. *Height* 8 *in.* *Fig.* 234.

833. Jug, of brilliant blue glass, somewhat similar in form to the preceding; it is inscribed round the neck, in yellow numerals, 1592, beneath which, in green, yellow, red, and white enamel, are encircling bands of plain linear ornaments. It

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has a silver gilt lid surmounted by a man holding a beaker; to the front is attached a dolphin, and on the hinge is seated a naked boy. *Height* $7\frac{1}{2}$ *in.*

834. Tankard, of brilliant blue glass, cylindrical, and having a pewter cover and base rim. It is dated *Anno* 1756; and ornamented with a large central cipher (IGI) enclosed within an oval panel, surmounted with an angel's head, and having a large vase of flowers, etc., on each side of it. *Height* $9\frac{1}{4}$ *in.*

835. Large Tankard, handsomely decorated in enamel work, etc. The principal ornament is the imperial eagle bearing a crucifix on its breast; on its wings the arms of the constituent portions of the empire are richly emblazoned, and beyond them the steel and flint of the Golden Fleece. It is inscribed das heilige römische reich mit sampt seinen gliedern (The Holy Roman Empire with all its members), and dated 1572. *Height* $10\frac{3}{4}$ *in.* *Coloured Plate* XXI.

836. Wiederkom (or very large Goblet, holding enough for a succession of draughts), cylindrical in form, and without a handle. It is entirely covered with rich enamel work, the subject of which closely resembles the preceding, but with the addition, at the back, of the brazen serpent. It is dated 1571. *Height* $10\frac{3}{4}$ *in.*

837. Wiederkom, cylindrical in form. It is ornamented with a gilt marginal border bearing pearled festoons, beneath which, in very brilliant enamel work, is the Imperial eagle, bearing on its breast an orb, and on its wings the same coats of arms and inscriptions as the last two specimens. It is probably of the seventeenth century. *Height* $8\frac{3}{4}$ *in.*

838. Wiederkom, cylindrical in form. It has a gilt marginal border, beneath which are enamel paintings, in eight compartments, representing the emperor [Rudolph II.], and the electors of Treves, Cologne, Mayence, the Palatinate, Saxony, and Brandenburg, each mounted on a white horse, and inscribed with his designation; the eighth compartment contains the Imperial eagle, and date 1611. *Height* $8\frac{3}{4}$ *in.* (Bernal Coll.)

839. Wiederkom, having a tall cylindrical body of small diameter with an expanding base. It is ornamented with a shield of arms twice repeated, viz., tierce per chevron or and sa. in base a plough-share ppr.; the crest is two horns, the dexter or, the sinister sa., from each of which issue three feathers counterchanged. Round the rim is a gilt and pearled imbricated border. *Height* 15 *in.* (Bernal Coll.)

840. Wiederkom, cylindrical in form. A gilt border, edged with blue and white dots, surrounds the margin; beneath which is enamelled a full length figure of a man in the costume of the period, with a stick and glove, and on the opposite side a large lily of the valley superscribed, "Gott mitt uns, Anno 1665." *Height* $8\frac{1}{2}$ *in.*

841. Wiederkom, cylindrical, with rounded base, resting on a bulb and bell-foot. It has a gilt marginal border, edged with white dots, beneath which are four white belts; between these are twenty four enamelled shields in rows of eight, being those of the Emperor and the cantons and various towns in Switzerland, with their names above. *Height* $11\frac{5}{8}$ *in.* (Debruge Coll.)

842. Wiederkom, with a cover, cylindrical with rounded base, resting on a

bell-foot. On opposite sides are similar medallions in enamel, consisting of shields enclosed in large green wreaths; between them are lily pots. The shields are accollé, and as follows: per fesse or and sa. in chief a demi lion ramp. sa. holding a sword proper, in base a fleur de lis or; 2. per bend sinister, sa. and or, a lion ramp. counterchanged holding a fleur de lis or. Crest a demi lion ramp. sa. holding a sword ppr. and issuing from two horns per fesse sa., and or counterchanged, terminating in fleur de lis. The first coat and crest are those of Breitschwerdt. There is a gilt imbricated border with blue dots. *Height* 12 *in.*

843. Wiederkom, with a cover, ornamented in coloured enamel with five full-length figures, representing John George I., Elector of Saxony, and four dukes of Saxony, each superscribed with the initials of his name and title, and surrounded by various decorations, including the arms of Saxony. Dated 1656, the year of the Elector's death. *Height* $9\frac{5}{8}$ *in.* *Fig.* 236.

Fig. 235.

Fig. 236.

844. Wiederkom, barrel-shaped. Beneath a gilt border, neatly executed in coloured enamel work, are a number of standing figures, being the family of Martin Queck. He is represented holding a goblet; "**Mardin Queck, Anno Domini,**

Plate XXII

GERMAN ENAMELLED GLASS.

1678"; behind him are his five sons. Then follows his wife, **Catharina Queckin,** and four daughters. Those already deceased have red crosses over their heads, and three children who had died in infancy are represented in their chrisom robes and without names. All the rest have their names on labels over them. The sons are Hans Jacob, Hans Georg, Hans Nicol, Hans Mardin; the daughters Margaretha and Eva. The intermediate surfaces are filled with verses of a religious character. *Height* $6\frac{5}{8}$ *in.* *Fig.* 235.

845. WIEDERKOM, having a border of gilt imbrications edged with pearl dots, beneath which is an enamelled figure of a man on one side, and his shield of arms on the other superscribed "JACOB PRAUN." The dexter shield is that of Braun of Nuremberg. *Height* $11\frac{1}{4}$ *in.* *Coloured Plate* XXII.

846. WIEDERKOM, a companion to the preceding, with a figure of Jacob Praun's wife, and a superscribed shield like the last. *Coloured Plate* XXII.

This pair of glasses is particularly interesting, as showing that the isolated specimens which occur may have formed part of similar pairs.

847. BOCALE, cylindrical. The arms of Saxony are richly emblazoned on its centre, with the superscription "F. A. R. P." (Fridericus Augustus Rex Poloniæ), probably Fred. Augustus I., 1697-1733. It is divided by three belts into four parts, holding about half a pint each, numbered in Arabic numerals, and intended to regulate the quantity of liquor to be imbibed by each guest, as in the case of the Peg Tankards of the sixteenth century. *Height* $8\frac{3}{4}$ *in.*

848. Small BOCALE, cylindrical. On its centre is a brightly enamelled royal crown and escutcheon, enclosing the cipher "F. A.," and supported by two Cupids; blue, red, and green drapery and scroll-work enrich the device, and the whole is enclosed between handsome borders of blue and red grape-laden vine branches, with green leaves and tendrils. This is, probably, connected with the same monarch as the last. *Height* $6\frac{5}{8}$ *in.* (Debruge Coll.)

849. Large TUMBLER, of bright blue glass, tapering slightly downwards. The surface is decorated with brilliant enamel work, executed in an artistic style, and representing an elaborate shield of arms, consisting of two coats impaled, with crests and mantlings, and the date 1678 beneath on a white scroll; from the latter spring two branches of leaves and flowers, which embrace the shield, and have between them, on the reverse side, a medallion formed of two palm branches, bearing a jewelled coronet, and enclosing a white cipher. The second coat and two of the crests are those of a Freiherr von Daube. *Height* $6\frac{3}{4}$ *in.*

850. Quaint GOBLET, of dark blue glass, the bowl of which expands slightly downwards, and is then contracted into a series of compressed bulbs diminishing in size towards an expanding bell-foot, so that the whole appears like an inverted decanter. Round the bowl is inscribed in large letters, and with each word of a different colour, SEI. ALZEIT. FROM. VND. FVRCHTE. GOT. 1582. (Be always pious and fear God.) *Height* $9\frac{5}{8}$ *in.*

851. GOBLET, similar in form to *Fig.* 856, and vertically striped with opaque white. On one side is a richly emblazoned shield of the arms

of Saxony, encircled with the Garter, and surmounted with an electoral crown. Above are the initials I. G. D. A. H. Z. S. J. C. U. B. (Johan Georg der Alter Herzog zu Sachsen, Julich, Cleves, und Berg), whilst encircling the whole device is the following inscription: *Bey Einweyhung des Neuerbauten Schieshauses Anno* 1678. (At the dedication of the newly built shooting house, 1678.) On the reverse is a target of which the bull's eye is pierced with an arrow, and the inscription, *Haubt Schiesen zu Dresden.* (Principal shooting at Dresden.) *Height* $7\frac{1}{2}$ *in.* (Bernal Coll.)

852. Goblet, having beneath a band of gilt imbrications three enamelled figures in masquerading costumes, two with blue dresses and red accessories, the third in buff with red accessories; two are fencing. The ground is bright yellow and green. *Height* $7\frac{3}{4}$ *in.* *Fig.* 237.

Fig. 237.

Fig. 238.

853. Goblet, having in enamel work, beneath a gilt imbricated border, on one side the figure of a lady with a curious horned head tire, habited in a blue dress with white patterns, and holding a black circular fan; on the other side is a complicated German coat of arms with a crest of a demi-lion rampant or, issuing from two horns, dexter or, sinister az., and holding a fleur de lis or. *Height* $8\frac{1}{2}$ *in.* *Fig.* 238.

GERMAN GLASS.

854. Goblet, having a large oviform bowl resting on a stem composed of a compressed bulb and a long drop, each rounded at the top, and hexagonally cut beneath; the original foot is replaced by one in metal perforated. The bowl is decorated with a fine enamel portrait representing a lady in the costume of the close of the fifteenth century, probably a Burgravine of Nuremberg. At the back is the shield and crest of the Burgraviate. The painting seems to be of the eighteenth century. *Height* $10\frac{1}{4}$ *in.*

855. Wine Glass, having a cinq-foiled bowl similar to that of *Fig.* 246, resting on a plain baluster stem; the margin of the bowl is ornamented with a band of gold, intermingled with alternate blue and white festoons, and edged with white dots, from which hang five blue pendants. *Height* $5\frac{7}{8}$ *in.*

856. Small Wiederkom, with cover, blown in a lozenge pattern; the outlines of the lozenges are picked out with lines of white enamel dots, and there are remains of denticulated gold borders near the rim and foot. *Height* $7\frac{1}{4}$ *in.*

This was bequeathed to Mr. Slade by G. S. Nicholson, Esq.

857. Large Case Bottle, of blue glass, having a quadrilateral oblong form with a short neck, and the shoulder, side edges, and base, all rounded. Three of the sides are ornamented with lilies of the valley and other large conventionally treated flowers in coloured enamel; the fourth side has a crowned white eagle displayed, perhaps that of Poland, and the date 1596. *Height* 9 *in.*

858. Bottle, of dark blue glass, hexagonal, and having a short broad neck with a silver dome cover, to which a large ring is attached. The sides are enamelled in bright colours, three with figures, and three with stiff flowers; the figures are those of our Saviour, inscribed above, *Salvator Mundij*, St. Peter, and St. John; in one of the panels is the date 1650. *Height* 5 *in.* (Bernal Coll.) This bottle is engraved in the *Art Treasures of the Manchester Exhibition.*

B. PAINTED IN GRISAILLE COLOURS.

The specimens in this class are decorated with paintings intended to be looked at by transmitted light, like painted windows, and they are probably the works of glass painters. They are usually executed in grisaille, but sometimes have colours added.

859. Wiederkom, cylindrical; it is encircled with five serrated or indented belts, between which, painted in grisaille, are figures on horseback and on foot representing a triumphal procession. Below these is the inscription "Churfürstlich Bayrisches Frewden-Fest, Bey den vorgangnen Tauff-Ceremonien des Durchleuchtigsten Fürsten und Herrn Herrn Maximilian Emanuel Ludwig Maria Joseph, In Jahr 1662." (The solemn rejoicing of the Electorate of Bavaria on the occur-

rence of the baptismal ceremonies of the most illustrious prince and lord the Lord Maximilian Emanuel Louis Mary Joseph, in the year 1662.) Maximilian Emanuel was born on the 11th of July, 1662, and succeeded his father as third Elector in 1679; he died in 1726. He was the celebrated general and governor of the Low Countries. *Height* 9 *in.* *Fig.* 239.

860. Large Goblet, having a tapering bowl resting on a spirally ribbed bulb, etc. The bowl is painted with a stirring scene of fighting horsemen, the figures being principally executed in grisaille, with lilac, blue, and green accessories; the distance of the background is bluish in tone; and the trees in the foreground are in grisaille, with bright green lights intermingled with a little dull green. The effect of portions of the figures, and other parts of the scene, is heightened by small patches of yellow stain, produced, as in window glass, with an oxyde of silver. A flattened bulb, immediately beneath the bowl, is of a bright orange, and a ruby cord extends from it through the centre of the remainder of the stem. The foot is painted with sprays of foliage. The whole execution is that of a painter of window glass, and produces but little effect at a distance. *Height* $8\frac{1}{2}$ *in.* *Fig.* 240.

Fig. 241.

861. Cylindrical Cup, with a dome cover, and three low feet; the surface is ornamented with a spirited painting, in brownish black, of a battle scene, the high lights of which are scratched in with a point; on the cover is a vine-wreath, and a remarkably well executed fly. *Height* $6\frac{5}{8}$ *in.* *Fig.* 241.

862. Wine Glass, having an oviform bowl cut in facets, resting on a cut

Fig. 240.

stem; the bowl is ornamented with two groups of oriental figures on horseback, attacked by lions and a tiger, with a landscape background; above and beneath is scroll-work, as also on the foot. The whole decoration is painted with brownish black relieved by gold outlines. *Height* 6 *in.*

863. Ewer, of a quaint form, octagonal, and ornamented with oriental figures, intermingled with scroll work, in Indian ink, relieved by having portions of the outlines picked out in gold. *Height* $4\frac{3}{4}$ *in.*

864. Basin, octagonal, belonging to the preceding, and with similar mouldings and painted devices. *Height* $1\frac{7}{8}$ *in.* *Length* 9 *in.*

C. GILT AND PAINTED.

The mode in which glasses such as these were made, is given in Kunckel's edition of Neri's *Art of Glass*. The gilding and colours do not appear to have been burnt in, and are generally enclosed between two surfaces of glass.

865. Tumbler, with coloured and gilt designs. This vessel is formed of two tumblers fitting closely one into the other; between them is painted, in transparent colours backed up with silver, the representation of a stag hunt, one of the huntsmen being on foot, the other on horseback. Above and below are gilt borders. At the bottom is a medallion in gold, backed with ruby, representing a man on horseback holding a sword. *Height* $3\frac{4}{10}$ *in.*

866. Tumbler, of opaque white glass, with medallions in gold and ruby colour. Two medallions are inserted in the sides, one of them bears a monogram formed of the letters *H v P.*; the other has a representation of a building with a bell turret and two chimneys, with the inscription FÜRNBERGISCHES SCHWEMHAUS STIFT (The Fürnberg establishment for floating wood). The bottom is formed of a gold and ruby medallion with a view representing a mountain from which issues through a tunnel a watercourse with floating logs of wood; over the archway is a tablet inscribed BERG GRUBEN (The Hill Tunnel). Above is Victory holding a shield and blowing a trumpet. Around is the legend

FECERAT HERCVLEOS IS NEMPE IN MONTE LABORES
QVI MONTEM IN SCVTO NOBILITATIS HABET.

Verfertiget Von Mildner, im Jahr 1788.

(He that made in the mountain these Herculean labours has in his coat of arms a mountain.—Made by Mildner in the year 1788.) The rim of the goblet is a band of silver. *Height* $4\frac{1}{4}$ *in.*

867. Goblet; having a long tapering bowl, formed of two plates of glass cemented together and cut into vertical facets; the inner plate is ornamented with devices formed of gold leaf, and having outlines scratched with a point. The subject is taken from the legend of St. Francis; on one side he is represented

sitting in a fiery chariot; on the reverse is the devil disguised as a lady, standing by the saint, who lies on the ground wounded, and with roses springing out of his blood; on the base of the bowl and the under side of the foot is a small ornament, apparently intended for the arms of Bavaria. *Height* $7\frac{3}{8}$ *in.* *Fig.* 242.

Fig. 242.

D. COLOURED GLASS.

Fig. 243.

868. Large Jug, of ruby glass, set in a perforated, richly-chased, silver gilt mounting with an elegant scroll handle. *Height* 14 *in.* *Fig.* 243.

869. Tankard, of ruby glass, in form somewhat like *Fig.* 2, *Coloured Plate* XVIII., but having a flat cover, inscribed *F. R.* in cipher under a crown. It is handsomely mounted in silver gilt. *Height* 6 *in.* (Bernal Coll.)

The cipher is probably that of Frederick I., King of Prussia, 1701—1713, and the tankard may have been made in the Potsdam glass works.

870. Bottle of ruby glass, having a depressed, spherical base, and a cylindrical neck, somewhat similar in shape to *Fig.* 3, *Coloured Plate* XVI. It is ornamented with fine engraved work, taking the form of a band round the neck with a scalloped edge; the base is also encircled with scallops, above which are two rich foliated scrolls, and between them two shields conjoined under an electoral crown. Of these the dexter bears the arms of Saxony, and the sinister J. G. in cipher, no doubt for John George II., Elector of Saxony, 1656—1680.

in whose service was the famous John Kunckel, to whom the workmanship of this specimen is attributed. *Height* 3 *in.*

871. Jug, of milk white glass; having a globular body, and a long narrow neck, encircled with a wavy clear glass fillet, attached to an opal handle; it is mounted in pewter with the Nuremberg stamp. *Height* 8 *in.*

872. Jug, of blue glass of a broader form, with coarse latticinio decoration, alternately twists and thick stripes. The handle is blue. *Height* 8 *in.*

873. Similar Jug, of blue glass, with coarse diagonal lines of latticinio, forming a trellis pattern. It has a pewter lid. *Height* 9 *in.*

874. Tall blue Goblet, with a dome cover, and resting on a colourless glass baluster stem, and a conical blue foot. The cover is surmounted by a finial composed of colourless bulbs, bearing a blue knob. *Height* 16 *in.*

875. Bocale, of bluish green glass, having the surface covered with pointed bosses, projecting both externally and internally. *Height* 10 *in.* *Fig.* 244.

876. Tumbler, of deep ruby glass, externally waved and clouded like Chalcedony Schmelz. The lip curves outwards. *Height* $4\frac{3}{8}$ *in.*

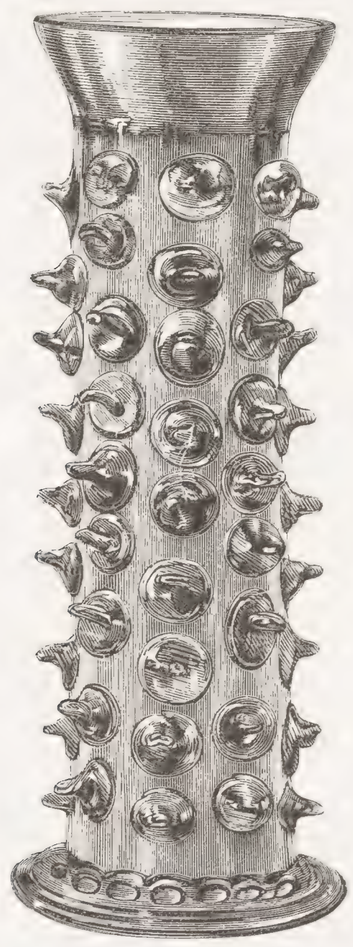

Fig. 244.

E. CRYSTAL AND CLEAR GLASS.

877. Ancient Hour Glass of clear glass, with three rings of dark green glass as a central belt. It is set in a handsome semi-Gothic wooden frame, composed of four pairs of slender pillars, supporting canopies with Gothic perforations, and overhanging flat tops. The tops are carved and gilt, and each contains a sunk panel decorated with a curious painting. That at one end represents an astrologer, holding a burning globe in one hand, whilst about him are sun, moon, and stars; the other panel contains a man in a red robe sitting at a table, on which is an hour glass, and contemplating a large dial on the opposite wall; above the man's head is a clock. The table is inscribed with the date 1520. *Height* 7 *in.*

Fig. 245.

878. Large Jug, of quaint form, ornamented with deeply-cut designs of conventional flowers combined with foliaged scrolls. *Height* 8 *in.* *Fig.* 245.

879. Tazza Cup, having a shallow bowl, in the shape of an oval quatrefoil with flutes between the foliations; it rests on a twisted stem, and is ornamented with engraved scrolls, somewhat similar to *Fig.* 246; the stem encloses a ruby and gold knot. *Height* $3\frac{3}{8}$ *in.* *Diameter* $4\frac{3}{4}$ *in.*

880. Shell-shaped Tazza, with a scallop-shaped bowl, resting on a twisted stem, which encloses a ruby and gold thread. The bowl and foot are ornamented with engraved scrolls, similar to the last specimen. *Height* $4\frac{3}{4}$ *in.*

881. Shell-shaped Cup, with deep cuttings, forming a series of bold projecting

compartments, the curved surfaces of which are beautifully engraved with figures, scrolls, and other ornaments. *Height* $5\frac{3}{8}$ *in.* *Fig.* 246

Fig. 246.

882. Wine Glass, decorated with scroll-work. *Height* $5\frac{7}{8}$ *in.* *Fig.* 247.

883. Tall Cup, of thin white glass, identical in form with No. 874; the bowl is oviform, and rests on a baluster stem and nearly flat foot. On the bowl are two subjects elaborately engraved; in one of them Bacchus, or Autumn, crowned with grapes, is seated on a tun; near him Ceres, or Summer, is reclining on sheaves, and receiving wine poured out by a boy. On the other side two boys, crowned with vine, are carrying a cup and a bunch of grapes; on each side is a standard vine. Over this subject is engraved "*Der süsse Trauben Safft Freud und ergötzung schafft*," (Sweet grape-juice supplies Mirth and Bliss.) Near the lower part of the bowl is etched in small characters "Herman Schwinger Cristall-schnider (glass engraver) zu Nürnberg." Round the foot is a wreath. *Height* $10\frac{3}{4}$ *in.*

Herman Schwinger, was born May 30, 1640, and died March 16, 1683. He attained great reputation in his art, and his productions are much valued.

884. Covered Cup, of very crystalline glass, richly engraved; the body is

funnel-shaped, spreading out again at the lower part, in which are eight deep sinkings made to assist in giving a firm hold; the under part of the base is hollowed out in a similar manner; the cover is dome-shaped, with a conical knob. The decoration consists of panels cut out of the solid, and with the ornamental framework in low relief; there are four on the body and four on the cover, all representing hunting scenes of various kinds, minutely engraved. *Height* $9\frac{1}{2}$ *in.*

885. Covered Cup, of crystalline glass, engraved and gilt; the bowl is funnel-shaped, and has a medallion with the bust of Frederick William King of Prussia (1713—1740), surmounted by a crowned eagle. On each side are eagles, and flags, on which may be distinguished the phœnix flying to the sun (a badge of the king), and the eagle of Brandenburg; below is another eagle. On the cover are trophies, consisting of kettle drums, drums, flags, and cannon-balls, and the whole is surmounted by a heavy cut and gilt knob. The stem is fluted and alternately gilt; the foot matches the stem and the cover. *Height* $12\frac{1}{4}$ *in.*

886. Covered Cup, of material and form similar to the last. On the bowl are two medallions in relief, one of ruby glass, the other of opaque turquoise; they each have engraved on them the cipher E. P., surmounted by the imperial Russian crown: between them are circular engraved medallions; one represents rays shining from heaven on a table, on which are placed a crown, a sceptre, and an orb, with the motto in gold, "DER ERFULLUNG GERECHTESTER HOFFNUNG" (To the fulfilment of the most righteous expectation). The other encloses a figure of Minerva, and has the legend "SIGENDE BEHERSCHENDE DURCH LIEBE UND WOHLTHATEN" (Conquering and mastering through love and good deeds). The cover, stem and foot, are ornamented with gadroons, partially gilt. *Height* $12\frac{3}{4}$ *in.*

The initials are those of Elizabeth Petrovna, daughter of Peter the Great, who ascended the throne of Russia December 5th, 1741, and died 1762.

Fig. 217.

VIII.—FLEMISH AND DUTCH GLASS.

Fig. 248.

The greater number of the specimens under this head were probably manufactured in Venice for the Flemish and Dutch markets, and decorated in those countries.

887. Goblet, ornamented with a finely etched portrait of the celebrated John van Olden Barnevelt, one of the founders of civil liberty in Holland, but who was falsely accused of a design to deliver his country into the hands of the Spanish monarch, and beheaded in 1617. On the opposite side is the inscription *J. V. O. Barnevelt.* *Height* $7\frac{1}{4}$ *in.* *Fig.* 248.

888. Goblet, similar in form to *Fig.* 248, ornamented with diamond etched devices. On one side are the arms of Orange, surrounded with the garter, and surmounted with a coronet; on the other side is the inscription "*De Prins Van Orange*" (The Prince of Orange), in large letters. Etched flowers and leaves decorate the foot. *Height* $7\frac{1}{2}$ *in.*

Fig. 249.

889. Goblet, of slightly smoky glass; it has a funnel-shaped bowl, ornamented with beautifully etched designs. On one side is a lady doubtless intended for Mary Princess of Orange, daughter of Charles I. of England, above which is a highly decorated inscription, **Het Welvaren Van De Princes** (To the welfare of the Princess); on the opposite side is a shield, surmounted with a coronet, and bearing the arms of Orange and England impaled; vine branches, etc., decorate the intermediate spaces and the foot. The stem is principally formed of a fine quatrefoil bulb. *Height* $6\frac{3}{8}$ *in.* *Fig.* 249.

This interesting goblet was in all probability made for some partizan of the House of Orange, after the death of William II. in 1650, while the Princess was guardian of his posthumous son, William III. of England.

Fig. 250.

890. Goblet, having a tapering bowl, ornamented with a Dutch merry-making scene, etched with a diamond in a masterly yet delicate style. The subject is divided into three portions, consisting of two dancing couples, while between them is an old man seated on a barrel, playing the bag-pipes; above is a large wreath, composed of leaves and branches of the vine, from which three large bunches of grapes descend so as to separate the groups. *Height* $7\frac{3}{8}$ *in.* *Fig.* 250.

891. Tall Wine Glass; the stem encloses two spiral white threads, and is

edged with bright blue denticulations. On one side of the bowl, diamond etched, are two coronetted shields of arms; viz. 1, two bars wavy between six billets couché; 2, three herrings crowned naiant in pale; these shields are tied together by loops. A circular wreath, surrounding a pair of hands supporting a heart, is etched on the opposite side, and the margin is inscribed *Hoc faxit Deus*, whilst the foot is inscribed *Crescant et multiplicentur*. *Height* $8\frac{1}{4}$ *in.* *Fig.* 251.

Fig. 251.

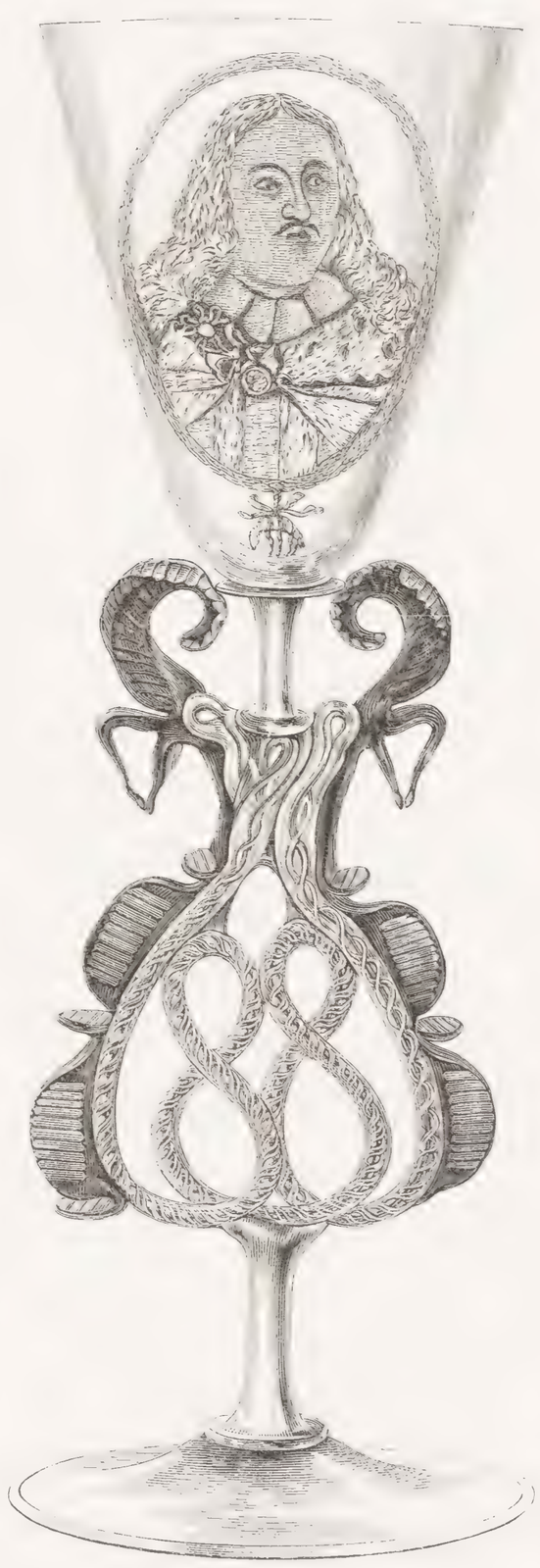

Fig. 253.

This goblet, which seems to be of Venetian origin, was evidently etched on the occasion of a marriage. Both the coats of arms upon it belong to Zealand families; the first to those of Cromstryen and Stavenisse, and the second to Verbrugge, Stoutenberg, and De Huybert.

892. Tall Goblet; the stem forms a double 8, and encloses a white and a red spiral thread; bright blue crested serpents' heads, etc., flank the rod. On one side of the bowl, diamond etched, is a portrait of Philip IV., King of Spain, habited in the robes of the order of the Golden Fleece; opposite to this are the arms of Spain. *Height* 12 *in.* *Fig.* 252.

893. Tall tapering Glass, having the bowl vertically channelled so as to form flutings, curving slightly at their summits. *Height* $13\frac{1}{2}$ *in.* *Fig.* 254.

894. Tall tapering Glass, with diamond etched decorations. On one side is a large coat of arms of the Prince of Orange; below which is an eagle; on the other side is a military figure, habited in the costume of the early part of the seventeenth century, and having a parrot at his feet; below these devices the bowl is closely covered with elegant sprays of leaves and flowers, and the whole decoration is etched with a point. *Height* $15\frac{3}{8}$ *in.* *Fig.* 255.

895. Tall tapering Glass, with etched decorations; on the upper part is the shield of the King of Spain, as sovereign of the Low Countries; behind it are the two crossed sticks of Burgundy, from which proceed chains attaching seventeen small shields in four rows; from the contracted legends over them, these seem to be intended for the seventeen Provinces of the Low Countries, viz., the duchies of Brabant, Limburg, Luxemburg, and Guelders, the counties of Flanders, Artois, Hainault, Holland, Zealand, Namur, and Zutphen, the marquisate of Antwerp, and the lordships of Malines, Utrecht, Friesland, Overyssel, and Groningen. Below the principal shield is the date 1655, and above, CONCORDIA. *Height* $15\frac{1}{4}$ *in.* *Fig.* 256.

896. Tall cylindrical Vase; in form like *Fig.* 239; it has a silver cover, and is elegantly ornamented with encircling belts of dentelle ornament with festooning, and two very large bouquets of flowers and leaves, the whole etched in an effective manner. *Height* 20 *in.* *Diameter* $4\frac{1}{4}$ *in.*

897. Tall Wine Glass; on the bowl is a masterly engraving of Diana with two greyhounds, and accompanied by two other dogs pursuing a hare; the device by a strange mistake is inscribed "St. Huybert." *Height* $7\frac{1}{8}$ *in.* *Fig.* 253.

898. Tall Wine Glass, of a similar form to the last; the bowl is richly engraved with various devices evidently alluding to a marriage. On one side are two shields accollés; the one bearing three lions rampant; the other a bull salient; the shields are in a richly ornamented cartouche surmounted by a coronet, out of which issues a lion rampant. On the other side of the bowl are two oval medallions enclosing ciphers; one of these is composed of the letters R V O; the other of the letters C A L P; issuing from each of them is a hand, and these meeting clasp a heart and anchor, on which two doves are perched; above are rays with two Cupids supporting a coronet, and the motto CONSTANT A IAMAIS; below is an altar with open book; on the left side of the altar is a female figure with fasces or a bundle of arrows, supporting the dexter medallions; on the right side, attended by naked boys, is a female figure bearing a cornucopia, and supporting the other medallion; from each medallion starts a handsome scroll. *Height* 9 *in.*

PLATE t.

Fig. 254. Fig. 256. Fig. 255.

FLEMISH GLASS.

899. Tall Wine Glass; the bowl is ornamented with medallions representing Mercury and Neptune, as gods of commerce and the sea, and engravings of ships; the rest consists of a deep border of scrolls, and festoons of fruit and flowers, engraved in the most finished and artistic style, enhanced in effect by small luminous discs interspersed about the work; in the bulbs beneath the stem are enclosed air-bubbles of a decorative character. *Height* 9 *in.* *Fig.* 257.

Fig. 257.

900. Large Plateau, having a sunk centre and broad margin, round which, embellished with intricate flourishes, the following inscription is etched: —

"Verstroy u selven noit daer buiten,
Zoekt gij de rust in u te sluiten?"

which may be paraphrased—

"Seek not without for peace and rest,
But seek it inwards, in thy breast."

On the centre of the back is etched, in very small characters, "Wm Van Heemskerke, Æt. 73. Leyden." *Diameter* 12½ *in.*

901. Wine Glass, having a slightly tapering bowl, resting on a long columnar stem cut into facets. The bowl is ornamented with a large medallion, containing a portrait of a middle aged gentleman wearing a bag-wig, and habited in the

costume of the eighteenth century; on the opposite side of the glass is a star with the motto beneath, "INCLINAT NON COGIT," and inscribed in a scroll extending above the medallion are the words, "M^R CORNELIS DE GIJSELAAR PENSIONARIS TE DORDRECHT." *Height* $6\frac{5}{8}$ *in.*

Cornelius van Gijselaar was born in 1751 at Gorinchem, of which town he became Pensionary in 1776; in 1779 he was elected to the same office at Dordrecht. In 1784 he married, and on that occasion the glass may have been engraved. After occupying a very prominent position in the stormy politics of his time he retired from public life, and died at Leyden in 1815.

902. WINE GLASS, having a slightly tapering bowl, resting on a long columnar stem, enclosing latticinio filigree work. On the surface of the bowl an elegant design is apparent when held up to the light, being a boy and girl releasing a bird from its cage, above which is a scroll, inscribed "AUREA LIBERTAS." The design was produced by means of fluoric acid, like an etching, by covering the surface with wax, and then, after outlining and stippling the subject through it with a steel point, by pouring the acid over the enclosed surface, to remain until the bared material became sufficiently bitten or punctured. This process is said to have been discovered by Schwanhard of Nuremberg, in the seventeenth century. *Height* $6\frac{5}{8}$ *in.*

903. Large GOBLET, having a fine oviform bowl, resting on a stem enclosing ornamental air-bubbles. The bowl is entirely covered with a picture, etched with the diamond and acid, in the manner of chalk or stipple engraving, so as to produce a striking effect. The subject is Bacchus seated on a barrel, surrounded by Satyrs, Bacchantes, Fauns, and goats, etc., grouped under masses of foliage; the whole occupies about three-fourths of the surface, the intermediate space being filled up with an entablature, surrounded by foliage, bearing the inscription:—

"Het druivenbloet,
Dat lieflyk zoet,
Noemt Saloman een spotter,
Die't gulzig drinkt,
En brast en klinkt,
Wort vroeg benooit en zotter.
F. Greenwood F^t."

(The juice of the grape, that is pleasantly sweet, Solomon (Prov. xx. 1) calls a mocker; he who drinks greedily, eats gluttonously, and is [constantly] hobnobbing, soon becomes an idiot and a fool.)
Height $10\frac{5}{8}$ *in. Fig.* 258.

904. WINE GLASS, of an emerald green, with a baluster stem ornamented with masks in relief, and partially gilt. On the bowl are the following devices in gilding:—The arms of Nassau-Orange under a coronet, probably for Henry Philip William, Prince of Orange, who died 1618; the arms of Nassau, as borne by Maurice, Prince of Orange, who died 1625; and between them the device of the latter, consisting of a tree cut down, while a new stem is springing from its root; above, the motto, "TANDEM FIT SVRCVLVS ARBOR" (The sucker at length becomes a tree). Presented by John Henderson, Esq. *Height* $6\frac{6}{10}$ *in.*

PLATE XI.

Fig. 253.

DUTCH GLASS.

IX.—ENGLISH GLASS.

Fig. 259.

The nationality of most of the objects placed under this head is very doubtful, and it is only on account of the dearth of specimens of unquestionable English origin, that it has been thought desirable to place them here. What little is known of English Glass has been alluded to in the Preliminary Essay.

905. Quaint Burette; having a short spout, and a handle over the top denticulated and ornamented with a handsome rose. *Height* 8 *in.* *Fig.* 259.

906. Sceau or Pail, having a body concaving to two-thirds downwards, where it forms a rounded ridge, whence it sharply tapers to a serrated base rim; it has an overhanging ribbed handle, and is moulded into very bold diamonds, with depressed centres. *Height* $5\frac{3}{8}$ *in.*

907. Tall Vase, very slender in form. It has a conical foot and small bulb, supporting an elongated, bulbous-shaped body, from which the neck rises with a slight bulge into a slightly overhanging, scalloped mouth, bearing on each side three curls of glass, which run downwards, attached to the neck; it has a tall steeple-shaped cover, and is vertically ribbed throughout. *Height* 11 *in.*

908. Tall Wine Glass; having a tapering bowl resting on a long stem; the bowl has engraved upon it the royal arms of England, of the House of Hanover, surmounted with a crown, and surrounded by a laurel wreath. *Height* $7\frac{1}{2}$ *in.*

909. Covered Vase; having a spreading foot, whence rises, to half the way up the body, an oviform bowl, inclining inwards slightly at its summit, and then bulging into a narrow ridge which recurves upwards into an almost equally broad neck; the cover is bell-shaped, surmounted by two knobs. The

surface is decorated with festoons of star-like flowers, composed of raised white dots or pellets, surrounding a green dot eye, of green dots surrounding a yellow eye, or yellow dots surrounding a green eye, all of enamel; these flowers are connected together with leaves and ribbons, executed in gilding and pink and red colours. *Height* 10 *in.*

910. Quaint covered Vase, a companion to the preceding.

911. Large Bowl, of thick, light green glass; having a slightly tapering form, and ornamented with eight vertical bands of bold filigree work, yellow and latticinio, between which are rude millefiori ornaments, the whole very coarsely executed. *Height* $5\frac{3}{4}$ *in.* *Diameter* $8\frac{1}{2}$ *in.*

This curious bowl is supposed to be a specimen produced at the once well-known glass works at Bristol, carried on by the Edkins family.

912. Tea Pot of milk-white glass, with enamelled decoration of a Chinese pattern, painted chiefly in red, and representing sheaves, birds, and flowers. The top has a similar pattern. *Height* $5\frac{1}{2}$ *in.*

This specimen is presumed to have been made at Bristol; by some, however, it has been considered to be Venetian.

913. Tumbler, of milk-white glass, cylindrical. It is very carefully painted with a love scene, in imitation of Dresden porcelain. *Height* $4\frac{3}{4}$ *in.*

This is likewise ascribed to the Bristol works.

914. Smelling Bottle, of thick cut glass, on one side of which is encrusted a bust of Queen Elizabeth, similar to that on the medal made by Dassier. *Height* 3 *in.*

The process by which this is made is described by Pellatt, *Curiosities of Glass Making*, p. 119, under the head of Cameo Incrustations. The device was made in a material fusible at a higher temperature than the glass. He attributes to the Bohemians the invention of this process.

ADDENDA.

ANTIQUE GLASS.

915. Alabastron, of an elongated bulbous form, and of dark blue glass with opaque white ornaments; these commence with a spiral band round the neck, passing into zigzags of a palmette pattern, and terminating with a thick spiral round the tapering base; at the sides are two small ears. Found in the Greek Archipelago. *Height* $5\frac{3}{4}$ *in.*

916. Pendant, in the form of a jug, of nearly black glass with a white zigzag round the body; it resembles No. 34. A similar ornament from Thebes is engraved in Pellatt, "Curiosities of Glass-making," Pl. ii. fig. 4. *Height* $\frac{7}{8}$ *in.*

917. Pendant, of purple glass, in the form of a negro's head. It is in form like a specimen from Thebes engraved in Pellatt, Pl. ii. fig. 5. *Height* $\frac{5}{8}$ *in.*

This and the last were obtained in the East by the Rev. Greville Chester.

918. Conical Cup, of opaque blue glass, much restored. It has been made by turning on the lathe, and has a moulding round the inner part of the rim. *Height* $3\frac{3}{8}$ *in.* *Diameter* $6\frac{1}{8}$ *in.*

919. Poculum, or Drinking Cup, of crystalline glass, engraved in intaglio apparently on the lathe. On one side is represented a man with a short mantle flying behind him; he appears to be sculpturing an upright stele or tablet, and holds a chisel and a hammer; beyond him is the figure of a reclining female holding a patera and a sistrum; near her is a small building with an arched roof and open at one end, where are curtains and railings, with a flight of steps. On the bottom are raised circles. This curious specimen is unfortunately cracked and slightly imperfect; it is probably somewhat earlier in date than the engraved bowl, described under No. 320, *Fig.* 74. *Height* $3\frac{3}{8}$ *in.*

920. Toy Bottle, of transparent deep blue glass. *Height* 1 *in.*

921. Similar Bottle, of opaque blue glass. *Height* $1\frac{1}{8}$ *in.*

922. Diminutive Flask, of blue glass with a flattened body. *Height* $1\frac{7}{8}$ *in.*

923. Massive Vessel, of greenish glass; having a cylindrical body with a circular opening in its flat top, and three loops on the upper edge. *Height* 3 *in.*

924. Bottle, with fluted handle, of pale amber coloured glass, splashed with opaque white spots, among which are scattered a few of pale opaque lilac. It is similar in form and make to No. 85, *Fig.* 28. *Height* $5\frac{1}{4}$ *in.*

925. Saucer, of greenish glass, with vertical sides and a turned over edge, and resting on a foot rim. *Diameter* 6 *in.* *Height* $1\frac{1}{8}$ *in.*

926. Oval Cameo, with an opaque white head in profile on a deep blue ground; the head appears to be the portrait of Germanicus or one of his two elder sons; it is enclosed in a bronze setting, and was found at Cumæ. *Height* $2\frac{1}{4}$ *in.*

927. Oval Intaglio, imitating a sardonyx: subject, Hercules with the lion's skin. *Height* $\frac{5}{8}$ *in.*

928. Finger Ring, of amber glass, with an oval bezel never engraved. Presented with the next by Edmund Waterton, Esq. *Height* $\frac{8}{10}$ *in.*

929. Finger Ring, of blue glass, with a slender hoop and a small diamond-shaped bezel. *Diameter* $\frac{8}{10}$ *in.*

930. Bead, of the same pattern as No. 50, *Fig.* 21, but of a spherical form, in which particular it differs from other specimens. Presented by John Henderson, Esq. *Diameter* $1\frac{1}{8}$ *in.*

931. Mass of Amethystine Glass, remarkably clear and transparent. It is evidently part of a larger cake, and was obtained during the Crimean war from Kertch. The period to which it belongs is uncertain. *Length* $3\frac{7}{8}$ *in.*

932. Circular Medallion, in glass mosaic, representing a fly. It is executed in natural colours on a white ground, and has a border formed of sections of a cane of black glass, enclosing a wheel-shaped pattern. This mosaic is stated to have been found at Herculaneum, but although the materials of which it is composed may be ancient, the medallion itself must belong to a later period. *Diameter* $1\frac{3}{8}$ *in.*

ORIENTAL GLASS.

933. A Chinese Armlet, cylindrical in section, of opaque green glass, imitating very closely one of the most valuable varieties of jade. So accurate is the imitation, that this object was sold for a large price when first brought to England. *Diameter* $3\frac{1}{8}$ *in.*

934. A similar Armlet, imitating jade, of a pale green mottled colour; not so well made as the last. *Diameter* $3\frac{1}{8}$ *in.*

935. A Chinese Armlet, with a semicircular section, and imitating green and white mottled jade. *Diameter* $2\frac{3}{8}$ *in.*

936. A similar Armlet, imitating opaque lilac jade. *Diameter* $2\frac{3}{4}$ *in.*

This and the three preceding specimens were presented by A. W. Franks, Esq.

937. A Chinese Snuff Bottle, of clear transparent glass, imitating very closely rock crystal. On the sides are two lions' masks in low relief. It has a pink glass stopper, imitating rhodonite. Presented by John Henderson, Esq. *Height* 3 *in.*

VENETIAN GLASS.

938. A large deep Bowl, similar to No. 370, *Fig.* 84, but somewhat more massive in form. The upper part is decorated with a deep band of scale or feather pattern in gold with raised enamel dots; the lower part is ribbed with diagonal gadroons; the foot is fluted. *Height* $6\frac{3}{8}$ *in.* *Diameter* 11 *in.*

939. Barrel-shaped Vase, with blue handles and foot; the companion to No. 533. *Height* $4\frac{1}{2}$ *in.*

940. Biberon, of clear glass, with a foot rim, handle, and ring round the body of deep blue glass. The handle is arched over the top, edged with denticulations, and surmounted by a knob. From one side projects a spout. *Height* $6\frac{7}{8}$ *in.*

941. Ewer, of elegant form, with a trefoil mouth and arched handle terminating in a lion's face; it is entirely ornamented with vertical bands of latticinio of the same pattern as *Fig.* 188. The upper part of the handle has been strengthened with a plate of gilt metal, on both sides of which are engraved the arms of the Medici, Grand Dukes of Tuscany. *Height* 11 *in.*

942. A Spoon, of clear glass, similar to Nos. 549, 550, but without a strawberry boss half-way down the stem. *Length* $7\frac{3}{8}$ *in.*

943. Diminutive Vase, of a transparent green, coated with flutings of opaque white and red. *Height* $1\frac{3}{4}$ *in.*

944. Box or Book, containing patterns of beads numbered up to 676, but of which a few are missing. This book was found in India with a quantity of beads, and had evidently been sent out for the use of some trader. *Height* $15\frac{1}{2}$ *in.* *Width* 9 *in.*

945. String of thirty-six Beads, of dark blue glass, partly gilt and ornamented with opaque white and yellow zig-zags in relief, and turquoise spots.

946. String of eighty-two Beads, of a dark blue, with avanturine spots.

MISCELLANEOUS.

947. An oval Cameo, of opaque lilac glass, representing St. Michael and the Dragon; the armour of the archangel resembles that of the fifteenth century, and appears to be German. *Height* $\frac{7}{8}$ *in.*

948. A Wine Glass, of deep brown glass, with a conical body resting on a base with concentric ribs; round the lower part of the body is a zig-zag of raised glass, above which are bands scored transversely. At the sides are loops supporting loose glass rings, of which two only remain. Probably German. *Height* $6\frac{3}{4}$ *in.*

949. A Wine Glass, of a deep green colour, with a conical body, resting on

an openwork stem, composed of a figure of eight, to which are attached two small lions. On the bowl are etched ornaments, consisting of three bunches of fruit and flowers, between which are the following devices, allusive to the contests between Holland and Spain: 1. A lion rampant, holding a sword, and supporting on a spear a cap of liberty. 2. An armed king driving an ass sinking under the weight of his loaded panniers. 3. A lion rampant, over the head of which an armed figure is striving to throw a noose; behind the warrior is a crown. Presented by John Henderson, Esq. *Height* $5\frac{1}{4}$ *in.*

950. Vessel, in form of a cat, in clear glass, with the body and tail diagonally ribbed; the latter forms a handle. In the centre of the back is a circular opening with a frilled edge. This object resembles in make No. 907, and is of uncertain age and country. *Length* $6\frac{3}{4}$ *in.*

951. Small Wine Glass, on a very slender stem; the conical bowl is engraved with vine leaves; the foot large in proportion to the bowl. This glass once belonged to George II. *Height* $5\frac{1}{4}$ *in.*

952. A Snuff Box, of oval form, set with glass pastes, imitating gems. The edges are surrounded with pearls, and the patterns consist of red flowers with green leaves on a blue ground; though the general form is European, the patterns and workmanship would seem to be oriental. *Height* $1\frac{1}{2}$ *in.* *Length* $3\frac{1}{4}$ *in.*

953. Locket, composed of two glass pastes set back to back under glass, and mounted in gold. The medallion in front imitates a shell cameo, and represents the portrait of a young man three quarter face to right. From a miniature in Mr. Slade's possession, this seems to represent Hugh Count de Crequy-Canaples who was born 21st July, 1702, and died at Orville, in Artois, February 2nd, 1785. On the reverse is an opaque white cameo paste, with the portrait of an aged man with a long beard, and a lady at his side who is resting her hand on his shoulder; at the side BURCH, R.A. From an engraved portrait by Bartolozzi, this seems to represent the same Hugh Count de Crequy as an old man, and no doubt the lady is his second wife, Mary, daughter of Edward Comerford, of Altry, county Kildare, who was born March 25th, 1738, and died in England, March 25th, 1796. See *Gentleman's Magazine*, vol. lxvi., p. 354. To this lady the locket once belonged. *Height* $2\frac{1}{2}$ *in.*

954. Oval Intaglio, in white chalcedony, set as a seal, and representing the same Hugh Count de Crequy as an old man. It is signed BURCH, R.A., and being by the same artist as the paste last described, it has been thought desirable to include it in this Catalogue. *Length* $1\frac{1}{4}$ *in.* Edward Burch, a very distinguished gem engraver and modeller, entered as a student in the Royal Academy in 1769, was elected an associate in 1770, and R.A. in 1771, being the first elected by the academicians. He died in 1814.

955. A Saucer, of opaque red glass, of a very brilliant colour, and full of crystals. It is made with copper, in imitation of the antique porporino, and is a production of the imperial manufactory of St. Petersburg, under the direction of the chemist, Leopold Bonafede. From the Universal Exhibition at Paris, 1867. *Diameter* 5 *in.*

APPENDIX.

APPENDIX

CONSISTING OF

VARIOUS WORKS OF ART PRESENTED OR BEQUEATHED TO THE NATION

BY THE LATE FELIX SLADE, ESQ.*

ANTIQUE ART.

1. An OENOCHOE, or JUG, of Greek painted pottery, elegant in form, and of the best period of vase painting. The figures are red on a black ground, and represent Dionysos (Bacchus) holding a cantharus towards a satyr, who has an Oenochoe in his hand; behind the former is a human-headed ibex. Durand Collection, No. 84; Hope Collection, No. 12. *Height* $11\frac{1}{4}$ *in.*

2. An OENOCHOE, similar to the last, but representing a seated satyr holding an amphora and cantharus; and a mænad, supporting on her right arm a small lion, and holding in her left a snake; below is a rich band of honeysuckle pattern. Durand Collection, No. 179; Hope Collection, No. 21. *Height* 11 *in.*

3. A TAZZA, with two handles, of Greek painted pottery, also of the best period of vase painting, unfortunately somewhat worn and restored. On the outside are red figures of Athletes washing, and within it a pair of Athletes anointing themselves. Rogers' Collection, No. 480. *Diameter* 1 *ft.* 1 *in. Height* $4\frac{3}{4}$ *in.*

4. A BOWL, of Roman red ware, commonly termed Samian, with figures in low relief. It is bell-shaped, and rests on a small foot. The design consists of a candelabrum and five columns, surmounted by satyric masks, with female figures between them; they seem to represent the four seasons, two of which are repeated. Within the bowl is a potter's stamp partly effaced, ATI... This vase, though found by Signor Riccio at Capua, was probably made at Arezzo; it resembles somewhat in design one figured in Fabroni, *Vasi fittili Aretini*, Tav. viii. It is engraved in Riccio, *Scavamenti dell' antica Capua*, Pl. IV., and in the "Illustrated London News," Dec. 30, 1854. *Height* $7\frac{3}{8}$ *in. Diameter* $8\frac{1}{4}$ *in.*

5. BOWL, of Roman red ware, or Samian, of a denser pottery than the last, but not so elegant in form or decoration. Round the upper part is a running scroll of foliage, and below are parallel flutings. Inside is the potter's stamp OF BASSICOEI. Found at Xanten in 1822. Engraved in Houben, *Denkmüler von Castra Vetera*, Pl. XXI., *fig.* 1. *Height* $3\frac{3}{4}$ *in. Diameter* 9 *in.*

6. The SWORD OF TIBERIUS. This is the iron blade of a Roman Sword, in perfect preservation, enclosed in its sheath; the latter is made of bronze, tinned so as to resemble silver. There are three cross bands of oak leaves, with four loops for suspension, and at the lower end is a triangular plate of bronze, on which is embossed an amazon with the *bipennis*, or double axe; above this is an arch with a Roman eagle and standards. On the upper part of the sheath is an embossed

* Unless otherwise specified, the objects here described are in the British Museum.

plate, representing a victorious general standing before a seated figure; on a shield, near the latter, is inscribed FELICITAS TIBERI, while behind is a figure of Victory with a shield inscribed VIC. AVG. (Victoria Augusti.) It is probable, therefore, that this represents Germanicus appearing before Tiberius, after his great victories on the Rhine. Part of the tang of the sword remains, but the handle is wanting. With it was found a medallion, apparently representing the head of Germanicus, but whether it belonged to the sheath or handle is not certain. This sword was discovered August 10, 1848, in a field in the lower part of Mayence, and an account of it has been published by Lersch, *Das sogenannte Schwert des Tiberius*, Bonn, 1849; by Klein, *Abbildungen von Mainzer Alterthümern*, 1850; and by Becker, *Göttinger Philologus*, 1850; see also the *Jahrbücher* of the Rhenish Antiquaries, xiv. p. 185; xvii. p. 39; and xxv. p. 113; *Gentleman's Magazine*, Jan., 1851; Roach Smith, *Collectanea Antiqua*, vol. iv., p. 197. It has also been described in the *Proceedings of the Society of Antiquaries*, 2nd series, vol. 3, p. 359. This remarkable relic passed from the hands of its finder, M. Gold, of Mayence, into the possession of Mr. Henry Farrer, at whose sale, in 1866, it was purchased by Mr. Slade, and presented to the British Museum. *Length* 2 *ft.*

7. A diminutive Antique Roman BOTTLE, of onyx, of a cylindrical form, and with a narrow neck, probably intended for perfumes. *Height* 2 *in.*

8. A RIGHT HAND, of life size, carved out of rock crystal; it is broken at the wrist, and the thumb and greater part of the fingers are wanting. It has probably formed part of an antique statue, composed of various materials. Nothing is known of its history, but a drawing of it by Santo Bartoli is preserved in the Royal Library at Windsor; it is No. 1207 in a volume obtained from the Albani family, lettered *Disegni di varie Antichita: Nettuno.* *Length* $5\frac{1}{4}$ *in.*

9. A leaden CASE or BOX, in which was discovered the beautiful glass urn, catalogued above under No. 216. It is made to fit the urn, and is of an inverted conical form with an overlapping cover, from which projects a small knob. Found in Sardinia. *Height* $12\frac{1}{2}$ *in.*

10. A collection of ANTIQUITIES, found in a grave at Leuna, near Merseburg, with the two engraved glass bowls, catalogued above under Nos. 320, 321. They consist of four earthen vases somewhat rude in form, two bronze vessels, two diminutive bronze spears, probably ornaments, a buckle, two spoons, and five bronze fibulæ, mostly of barbarous work. Presented to the British Museum, 1867.

11. Jet ORNAMENTS and a SHELL, found in a small stone cist at Cologne, with the disk of gilt and enamelled glass, described above under No. 317. These are an armlet with a denticulated edge, two pins with globular heads, a pine cone, perhaps belonging to another pin, and a medallion with a loop for suspension ornamented with a head of Medusa; there is also a cockle shell which had been burnt. These objects are engraved in the *Jahrbücher* of the Rhenish Antiquaries, Heft xli.

MEDIÆVAL AND RENAISSANCE ART.

12. A carved ivory PANEL, of Byzantine work, representing apparently two subjects; in one are children kissing the hem of Christ's garment; in the other theav Siour in glory attended by angels. These subjects are accompanied by

Greek inscriptions. *Height* 6 *in.* *Width* 5 *in.* Presented to the British Museum in 1856.

13. Pair of Ivory Tablets, made to contain wax for writing. They are of the commencement of the 14th century, and have various love scenes carved on the outside in low relief. On one leaf are a gentleman and lady hawking; on the other, a gentleman kneeling is offering flowers to a lady who is making a wreath. The carving is unusually good. *Height* $4\frac{3}{10}$ *in.* Presented to the British Museum in 1856.

14. Leaf of a devotional Tablet, carved in ivory, and of the 14th century. Two subjects under canopies: the Entombment, and the Visit of the Three Maries to the Tomb. *Height* $4\frac{3}{8}$ *in.* Presented to the British Museum in 1856.

15. Centre of a Triptych, carved in ivory, and of higher relief than those last described; it represents the Virgin and Child seated, and a lady kneeling to them; at the back is sculptured in low relief the Nativity; on the edges are roses. This specimen is of the 14th century, and may be of English workmanship. *Height* $2\frac{4}{10}$ *in.* Presented to the British Museum in 1856.

16. Panel, of metal work, probably part of a German book cover. In the centre is an oblong plate of early German champlevé enamel, representing the Brazen Serpent between Moses and Aaron; around are set six oblong plates of enamel with metal scrolls and gems between them; four of these have patterns in cloisonné enamel, and appear to be of the same date as the central plate; the other two are of champlevé work and somewhat later. The whole of these ornaments are enclosed in a broad band of silver with stamped designs in very low relief, and studded at intervals with knobs of lapis lazuli and crystal. The work of this portion appears to be of the 14th century. The central panel is engraved in Art Treasures of the Manchester Exhibition, Vitreous Art, Pl. 6. Fig. 2. From the Préaux Collection. *Height* $8\frac{3}{4}$ *in.* *Width* $6\frac{1}{2}$ *in.*

17. Cuirbouilli Case, or Forel, to contain a book; on both sides is a coat of arms, viz., a bend embattled counterembattled. The crest is a maiden's head; in the corners is the badge, or *impresa*, of the family, a padlock. The ground is covered with scrolls. It appears to be of Italian work, and of the 15th century. Engraved in the Catalogue of Antiquities and Works of Art, exhibited at Ironmongers' Hall, p. 298. *Height* $6\frac{3}{4}$ *in.*

18. Cuirbouilli Case, for a book, of Italian work, and of the early part of the 16th century. On it is a shield of arms, a griffin rampant within a bordure semée of peacocks' feathers (?). *Height* 5 *in.*

19. Arched Panel, of cuirbouilli, representing in high relief a Crucifix, with attendant angels and figures of St. John the Evangelist and St. Paul. German work of the 16th century. *Height* 1 *foot* 3 *in.*

20. Quadrangular Plate, of silver, on which is very delicately engraved the Adoration of the Magi, with the inscription below, PROCIDENTES ADORAVERUNT EVM. Around is a border sprinkled with flowers. Flemish work, and perhaps by Crispin de Passe. *Height* $5\frac{1}{4}$ *in.* *Width* 4 *in.*

21. Oval Plate, of silver, engraved and filled in with niello; it represents a head of Medusa between military trophies, and may have decorated some weapon. *Length* $2\frac{7}{8}$ *in.*

22. English oval Watch, of the time of James I., with astronomical dials, etc., made by H. Roberts. The face and case are ornamented with engraved work. Within the lid are the arms of the Gurney family of Norfolk, differenced by a rose, probably the coat of Leonard Gurney, seventh son of Henry Gurney of West Barsham, in Norfolk, who was living in 1614 and 1627. See the Record of the House of Gournay, p. 467. Presented to the British Museum in 1856.

23. An enamelled border Tile, with arabesque pattern in white, on yellow, green, and blue ground; the various colours are separated by lines in slight relief.

It is said to have come from the Alhambra, and if so, must have formed part of the restorations made to that building by Charles V. *Dimensions* 6 *in.* by $5\frac{1}{4}$ *in.*

24. Pilgrim's Bottle, of Italian majolica, finely painted with battle scenes in the style of Orazio Fontana. Date about 1550. *Height* 1 *foot* 1 *in.*

25. An Ewer, of black glazed pottery, probably Venetian, with coloured decorations and gilding not burnt in; they consist of a shield, three clubs in bend between two stars, with a rose on each side. Engraved in Choice Examples of Art Workmanship, (Cundall, 1851). *Height* $11\frac{1}{2}$ *in.*

26. Blue earthenware Ewer, of quaint form, with ornaments in white and yellow. Probably made at Nevers between 1650 and 1680, the period to which specimens of this kind are referred by M. du Broc de Segange (Faience de Nevers). Engraved in Choice Examples of Art Workmanship, and in Marryat's History of Pottery and Porcelain, 3rd edition, p. 114. *Height* 9 *in.*

27. Ewer, of tortoiseshell earthenware, with a sharp spout and twisted handle, ascribed to a fabric at or near Avignon. *Height* $9\frac{1}{4}$ *in.*

28. Flask-shaped Bottle, of Venetian ruby glass, with vertical flutings, similar to the specimen described above, No. 743. It has a metal foot and stopper. *Height* $10\frac{3}{4}$ *in.* Presented to the British Museum in 1851.

29. A similar Flask to the last. Presented to the Museum of Practical Geology in 1851.

30. A Tazza Wine-Glass, with a twisted stem and frosted bowl. Similar to No. 702, *Fig.* 220. *Height* $8\frac{1}{4}$ *in.* Presented to the British Museum in 1851.

31. An Ewer and Cover, of white Venetian glass, with reticelli ornament, somewhat similar in form to No. 621, *Fig.* 185. *Height* 9 *in.* Presented to the British Museum in 1851.

ORIENTAL WORKS OF ART.

32. A Chinese Ornament, carved in grey chalcedony, representing a boy with a dog on his shoulders. *Height* $2\frac{1}{4}$ *in.*

33. A Japanese Box, of gold-coloured lacquer, of an oval form, and dividing into five compartments, made to hold various medicines, and connected by a cord passing through the two ends of each. The subject represented on this case is a representation from a pantomime, known as *Utsubozaru*, representing a man seated holding a monkey by a string, before whom is dancing a second man with a musical instrument. To the silken cord which passes through the sides of the case is attached a button, or *netsuge*, intended to prevent it from slipping through the girdle. In this instance, the button is composed of enamel on copper, enclosing an ivory plate, with three masks in sunk relief; over the cord is passed a bright red lacquered bead.

34. An ivory Netsuge, or Button, in the form of the mask or face of a demon, with budding horns. On the back is inscribed the sculptor's name, To-mo-chika.

35. Another, representing a lady, the Goddess of Riches, Ben-ten, with a fan and a scarf. It bears the same sculptor's name as the last.

36. Another; a lady with a fan, and at her side a child, with a rabbit.

37. Another; a man seated, with disshevelled hair, and with chrysanthemum flowers in his lap; probably from Chinese history.

38. Another; an elongated man, with ancient sword and wild beard. Inscribed Go-gun mo-kang.

39. Another; a seated figure, with conical head and beard, representing Gehow, one of the seven gods.

40. Another; representing Ho-tey, another of the seven gods, as a man carrying two bags at the end of a stick across his shoulders; in one of the bags is seen a child.

41. Another; a group of two children, very well carved, one of them is playing with a windmill toy. Sculptor's name, Reyo-min.

42. Another; an old man, boy and puppy. Same sculptor as the last.

43. Another; two men, with singular ears; one of them is pounding rice, which is carried off in a bag by the other. Sculptor's name, Tada-chika.

44. Another; two men supporting a monstrous gourd.

45. Another; two mythical figures (Sho-jo), at a cauldron, one of which seems about to give the other a blow with a ladle. Compare Siebold, Nippon, Pl. xl. fig. 593. Sculptor's name, Ho-cien.

46. Another; a man seated, surrounded by four imps.

47. Another; three men seated round a large bag. Carved by To-ko.

48. Another, in the form of a bottle, with stopper; round it two mythical figures (Sho-jos) seem playing at bo-peep.

49. Another; a monkey holding a tortoise. Sculptor's name, Kô-gain.

50. Another; a buffalo reclining, very carefully carved. Sculptor's name, Tomo-tada.

51. Another, representing a group of bamboos, under which are seven figures, alluding to seven wise men in China, A.D. 300; it is inscribed Giok-yo-ka Reyo-giun.

52. Another, in the form of a sacred bell, round the upper part of which is coiled a snake. This alludes to an old Buddhist legend.

53. Another; three fruit, on which is resting a fly. It is inscribed Giok-yo-cy.

54. Another, in the form of five almonds, with a snail on one of them; the other four have openings in them, representing views in Japan. Maker's name, Tama-gawa.

55. Another, in the form of a fruit and vegetables.

56. A BUTTON or NETSUGE, made of pressed horn; in front are half figures of a warrior and an evil spirit; at the back the moon appearing out of clouds, and a demon's face in water. $1\frac{7}{8}$ *in. square.*

57. Another, carved out of hard wood; it is in the form of a fruit, within which are two figures playing at draughts. *Diameter* $1\frac{1}{2}$ *in.*

58—61. Four metal PLATES, for the fastenings of pouches, with various figures in low relief. *Length* 3 to 2 *in.*

62. Another, similar; representing the moon and wild fowl flying.

63. Another, with a stork in high relief.

64. Another, with a female mask. *Diameter* $\frac{3}{4}$ *in.*

65, 66. Two CHARMS, or ORNAMENTS, in the form of gourds; one is of metal, the other of basket work.

PAINTINGS.

67. A Painting, on panel, by Cornelis Janssen, representing Sir Dudley Carleton, ambassador to the Hague, and afterwards Viscount Dorchester. It is inscribed *Ætatis* 52 *Aº* 1625.

68. A Painting, on panel, by Cornelis Janssen, a companion to the last, and representing Anne, Lady Carleton, wife of Sir Dudley Carleton, and daughter and coheir of George Gerrard, Esq.

These paintings were purchased by Mr. Slade, and presented by him to the National Portrait Gallery, November, 1860.

MANUSCRIPTS AND PRINTED BOOKS.

MANUSCRIPTS.

69. The Gospels of St. Luke and St. John, written in Germany at the end of the 12th or beginning of the 13th century, and having the initial letter to each book finely illuminated. The two other Gospels of this Evangelarium are in the collection of Sir Thomas Phillipps. It appears to have belonged to the nunnery of Heiningen, in the diocese of Hildesheim.

On one side of the binding are plates of Limoges enamel of the 13th century, representing the Saviour in glory, within a rich border. This cover is engraved in Lacroix and Séré, *Le Moyen Age et la Renaissance*, tom. v. *Reliure*, and in Libri, *Monuments inédits*, Pl. vii. From the Soltykoff Collection.

70. A thin Quarto, on Vellum, containing "Capitoli e ordinationi della compagnia secondo la sua proprieta decta Opera di Pieta," &c. This guild seems to have been established at Empoli, in Tuscany, under confirmation of Pietro Andrea Gamaro, of Bologna, Vicar-General of the Archbishop of Florence, 1529. The volume is in its original binding of wooden boards, and covered with dark leather, tooled in gold, and on one side is inserted a coloured drawing.

71. A Ducale, or original commission from Pietro Lando, Doge of Venice, to Niccolò Nani, as Podestà and Captain of Istria, 1543. It has in it the arms and portrait of Nani, and is in the original binding of red morocco. On one side is inscribed NICOLAI NANI, on the other MDXXXXIII.

72. A Volume, containing copies of Bulls of Pope Paul III., and of letters of Princes, etc , relating to the Council of Trent, 1545-6: collected from the original records, and written "manu propriâ" by Angelo Massarelli of San Severino, Secretary to the Council, as certified by Olaus Magnus, Archbishop of Upsala, and Giov. Pietro Ferretti, of Ravenna, Bishop of Milo, 15th February, 1548. Folio, on vellum; in its original binding of dark morocco, with gilt tooling.

73. "Canon Missæ; additæ sunt Præparatio ad missam et Orationes quæ ab Episcopis [dicuntur] cum solemniter vel private celebrant; necnon gratiarum actiones missæ sacrificio peracto. Juxta correctionem novi missalis." Written on vellum in a beautiful Italian writing, of the beginning of the 18th century. In fine red morocco binding of the time, with the arms of Cardinal Piccolomini.

74. A small Volume, written on paper by Esther Inglis; a wonderful specimen of caligraphy. It is entitled "Le livre de l'Ecclesiaste ensemble le Cantique de Salomon, escrites en diverses sortes de lettres par Esther Anglois, Françoise, a Lislebourg en Escosse, 1599." Dedicated to Anthony Bacon, and containing his arms as well as a portrait of the writer. It is bound in embroidered velvet. A full description of this volume was communicated to the Society of Antiquaries by Mr. R. R. Holmes, and is printed in the Proceedings, 2nd series, vol. i., p. 316.

75. "Panegyrique à tres grant et tres puissant Prince Charles, Prince de Galles, etc. Par Gilbert Primerose, ministre du Saint Evangile," in two books, the former in praise of James I., the latter of the Prince of Wales. The original

manuscript in the handwriting of the author, with various autograph approvals and recommendations of the work, among which are those of Sir William Alexander, Sir Edward Conway, and Daniel Featlye. In its original vellum binding, stamped with the arms of the Prince of Wales.

76. "Office de la Vierge accompagné de plusieurs autres prieres, escrites par N. Jarry, 1650." An exquisite little piece of penmanship, with coloured drawings. It is in its original binding of shagreen, with the arms and monogram of Marie Nicholai de Goufrainville.

77. A Selection of Poems from the works of Voltaire, Fontenelle, Le Mierre, La Fontaine, Bernard, and others, very beautifully written by Desruelles, and dated Paris, 12th October, 1780. It is illustrated with tinted pen and ink drawings, and bound as a pocket book.

78. A very large Music Book, of vellum, containing *cantate* of various authors; written by John Paul de Columnis, with designs in pen and ink by Carlo Buffagnotti. On the frontispiece are the arms of the Medici family. The binding in red morocco exhibits a splendid piece of tooling.

79. A small Music Book, containing English songs written at the beginning of the 18th century; bound in olive morocco, richly tooled in gold, and bearing the arms of England.

80. An autograph, but undated, Letter from Sir Walter Scott to Mrs. Robert Slade, declining a dedication made to him as the author of Waverley; with extract from a letter from Mrs. J. R. Phillot, naming the year 1821 as the date of the letter, and an announcement to Mr. Slade of the death of Sir Walter Scott.

81. A Letter from the Chevalier d'Eon to Mr. [Robert] Slade, thanking him for a donation in money to enable him to return to his own country. August 7, 1802.

82. A Letter from George Silk, notary public, to Mr. Robert Slade, testifying to his having examined the corpse of the Chevalier d'Eon, and ascertained that he was of the male sex. Dated Doctors Commons, May 27, 1810.

PRINTED BOOKS IN ANCIENT BINDINGS.

83. Epistole Ovidii cum commento. Small folio. Lyons, 1528. In the original oak boards covered with leather, and having stamped panels on the sides; one of them is of large size, and represents the Tiburtine Sibyl showing to the Emperor Augustus the Virgin and Child in the sky; it is surrounded with borders, with figures and grotesques; on a shield are the initials, I N, probably of the binder. This design, only from another book, is engraved in Dibdin's Decameron, vol ii., p. 467, and in Arnett's Art of Bookbinding, p. 90. The other panel represents the vision of St. Bernard, around which are other figures in small compartments. M. Libri, from whose collection this was obtained, has described it as French, but it would appear rather to belong to the Flemish school.

84. Claudii Ptolemæi Alexandrini Geographicæ enarrationis libri octo. Folio. Lyons, 1541. A very fine specimen of Italian binding of the period, brown morocco, gilt edges; the sides are covered with gilt ornaments, elegantly tooled in compartments. In the centre of one side of the cover is stamped in gold a medallion, in which are represented a soaring eagle, rocks, and fish swimming in the sea; it is surrounded by the motto, PROCVL ESTE. In the centre of the other side is stamped, in gold letters, APLLONII PHILARETI.

85. La Cyropédie de Xenophon, traduite de Græc en langue Françoyse par

Jaques de Vintemille, Rhodien. 4to. Paris, 1547. The copy bound for King Edward VI., whose arms and cyphers are on the sides, which are ornamented with strap work in black on a brown ground in the Grolier style.

86. Claudiani Opera. 12mo. Lyons, 1551. In the original binding of red morocco, richly tooled on the sides and back; with a coat of arms and the initials A.B. on each side; the edges are gilt and gauffred.

87. Julii Obsequentis Prodigiorum liber. 12mo. Lyons, 1553. A fine specimen of French contemporary binding; on each side are the arms of Madruccio; the edges are gilt and gauffred.

88. Pauli Æmylii Veronensis historici clarissimi de rebus gestis Francorum libri x. 8vo. Paris, 1555. A beautiful example of the French style of the period, the sides richly ornamented with oval panels and corners of arabesque work; the edges gilt and gauffred.

89. Della Institutione morale di M. Alessandro Piccolomini libri xii. 4to. Venice, 1560. Bound in red morocco, in the oriental style of the period, with deeply sunk panels; the edges gilt and gauffred.

90. Il Cortegiano del Conte Baldessar Castiglione. 12mo. Lyons, 1562. A richly ornamented and contemporary French binding, having in the centre *ΦΦ*, the monogram of the French poet, Phillippe Des Portes.

91. Der Stat Nürmberg verneüte Reformation, 1564. Folio. Frankfort on the Main, 1566. Large paper; two vols. in one. A magnificent specimen of German binding of the period. The sides and back are covered with gold tooling, and variously coloured. This copy was no doubt presented to the Emperor Maximilian II. as his arms are painted on the elegantly gauffred gilt edges, together with those of Nuremberg.

92. Constitutiones editæ et promulgatæ in Synodo Dioecesana Placentina. 4to. Piacenza, 1570. A rich Italian binding in orange coloured morocco, with the arms of Pope Pius V. on the sides.

93. Poetica di Aristotele vulgarizzata et sposta per Lodovico Castelvetro. 4to. Vienna, 1570. A beautiful specimen of inlaid morocco binding by Derome père; the inside lined with purple morocco with gilt borders.

94. Officium B. Mariæ Virginis nuper reformatum et Pii V. Pont. Max. jussu editum. 8vo. Christ. Plantin, Antwerp, 1575. Engravings by Peter van der Borcht, Hieronymus Wierix, Peter Hüs, and Abraham de Bruin. In a vellum binding curiously cut into squares, through which a lining of crimson silk is seen. The edges are gauffred.

95. L'opere d'Oratio poeta lirico comentate da Giov. Fabrini da Fighine. 4to. Venice, 1581. A fine French binding of the time, with the arms of Henry III. as King of France and Poland in the centre; the sides are covered with fleurs de lis, and have gilt corners. This specimen is engraved in Libri, *Monuments inédits*, pl. xl.

96. Jordanus Brunus, Nolanus, de Umbris Idearum. 8vo. Paris, 1582. Richly ornamented French binding of the period, with arms in the centre.

97. Joannis Camilli Zaccagni Romani Oratio prima; de laudibus Leonis Decimi Pont. Maximi. 4to. Rome, 1622. In the original Italian binding, elaborately ornamented; in the centre of the panels are the arms of Cardinal Carlo de' Medici, to whom the book is dedicated.

98. Contemplations upon the Historical part of the Old Testament; the eighth and last volume, by I. H. Dean of Worcester (Bishop Hall). 8vo. London, 1626. The dedication copy to Charles I., in fine English binding, with the King's arms in the centre.

99. De vitâ et moribus Ignatii Loiolæ auctore Joanne Petro Maffeio. 8vo. Lyons, 1638. The binding is of morocco, with richly gilt sides, inscribed HOC TE MUNERE DONAVIT CLAVDIVS TAPIN, 1640.

100. Office de la Semaine Sainte, Latin et François. 8vo. Paris, 1712. A most beautiful specimen of binding by Duseuil; the inside of the covers lined with red morocco and decorated with the arms of Marie Louise Adelaide, wife of Philippe, Duc d'Orleans (Egalité), within a rich gilt border. From the Empress Josephine's Library.

101. Johann Arndt's Paradiess Gärtlein. 12mo. Ulm, 1722. A curious binding, formed of tortoiseshell, with silver edging and clasps to match. The sides are ornamented with panels of piqué ornaments in silver and with occasional insertions of mother of pearl. On one of the designs is inscribed GOTT ALLEIN DIE EHR, on the other, SIHE DAS IST GOTTES LAMM.

102. La Sainte Bible. 12mo. Cologne, 1739. A fine specimen of inlaid binding in a floral pattern by Monnier, whose name occurs among the ornaments.

103. Heures nouvelles dédiées à la Reine. 8vo. Paris, 1749. A curious specimen of Padeloup's binding; the sides represent flowers in inlaid leathers of various colours; the corners have large scollops; inside one of the covers is a small looking-glass.

104. Hoyle's Games. 12mo. London, 1826. A singular specimen of binding in morocco by Boyer. The outside is of orange morocco, and delicately ornamented with gold tooling; the inside is of inlaid leather, representing the King of Spades and King of Hearts in their proper colours.

105. The cover of a book in red morocco, diapered with crowned L and fleurs de lis, probably made for Louis XIII. of France.

PRINTS AND ETCHINGS.

The collection of Prints and Etchings is so extensive that a brief summary of the contents will alone be admissible. The judgment and care bestowed upon its formation throughout a long series of years is especially evidenced by the purity and brilliancy of the impressions—mere rarity having been, in Mr. Slade's estimation, a matter of secondary importance. Carrying out his intention of gathering together a typical series, whilst never missing an opportunity of adding important specimens of the works of the great masters, he did not attempt to form a complete illustration of their works, and one or more specimens of the less important engravers were deemed by him sufficient for the purpose.

The cost of the collection was estimated by Mr. Slade at £16,000. It contains 7,806 specimens, and though some of the prints are duplicates of those already in the British Museum, they are frequently much finer in state and condition. And consequently the exhibition can now be made to the public of many of the important examples, without infringing upon the series of any artist's works preserved in the Portfolios. In very many instances, however, especially in the Portraits, both Foreign and English, deficiencies have been supplied which had long been wanting. And the large number of choice proofs of the works of the English engravers of the present century, which previously were inadequately represented, and had become extremely difficult to procure, form a very valuable addition to the National collection.

THE EARLY ITALIAN SCHOOL.

Nielli - - - - - -	9	Florentine - - - - -	3
Venetian - - - - -	5	Paduan - - - - - -	4

Three of the Nielli are undescribed by Duchesne. Among the other prints are comprised the rare print of The Ships, by Girolamo Mocetto, and specimens of Andrea Mantegna, Zoan Andrea Vavassore, Giovanni Battista del Porto, and an interesting early print, by an unknown master, of two Females seated on the ground, after a supposed design by Raphael (Passavant, 34).

ROMAN SCHOOL.

The Roman series comprises forty-four engravings of Marc Antonio Raimondi and his immediate followers and pupils, thirty-one of them being by Marc Antonio

himself, of which The Holy Family under the Palm Tree (Bartsch, Peintre Graveur, vol. xiv., No. 62), St. Cecilia (Bartsch xiv., 116), Dido (Bartsch xiv., 187), Lucretia (Bartsch xiv., 192), and The Judgment of Paris (Bartsch xiv., 145), are fine examples.

BOLOGNESE SCHOOL.

This is represented by four examples of the etchings of Agostino Caracci.

MODERN ITALIAN SCHOOL.

Pietro Anderloni - - 4	Giuseppe Longhi - - 5	Antonio Perfetti - - 1
Giovita Garavaglia - 1	Raphael Morghen - - 10	Carlo Ant. Porporati - 3

GERMAN SCHOOL.

Master of 1466 - - 2	Jakob Binck - - - - 2	Hans Sebald Beham - 39
Cards, 15th Century - 3	Lucas Cranach - - - 1	Heinrich Aldegrever - 5
Martin Schongauer - 9	Hans Burgkmair - - 1	Virgil Solis - - - 16
Israel van Meckenen 4	Albrecht Glockenton - 1	Franz Hogenberg - 1
Albrecht Dürer - - 32	Albrecht Altdorfer - - 1	Remigius Hogenberg 1
Matheus Zasinger - 2	Barthol Beham - - - 2	Wenceslaus Hollar - 260

Especial reference must be made to the coat of arms of the Passion by the Master of 1466 (Bartsch vi., 88), The Flight into Egypt (Bartsch vii., 7), The Death of the Virgin (Bartsch vii., 33), and a brilliant impression of The Virgin Enthroned (Bartsch vii., 71), by Martin Schongauer. The High Priest rejecting Joachim's Offering (Bartsch vii., 30), by Israel van Meckenen. Of the works of Albrecht Dürer, the specimens of Adam and Eve (Bartsch vii., 1) and The Conversion of St. Eustachius (Bartsch vii., 57) have been long esteemed as two of the finest extant, and his Prodigal Son (Bartsch vii., 28), and Knight of Death (Bartsch vii., 98), are likewise extremely brilliant. The fine portraits of Christian II. of Denmark (Bartsch viii., 91), by Jakob Binck; the Emperor Charles V. (Bartsch viii., 60), and Ferdinand I. (Bartsch viii., 61), by Barthol Beham. John of Leyden (Bartsch viii., 182), by Heinrich Aldegrever; of Mary, Queen of England, by Franz Hogenberg; and of Philip II. of Spain, by Remigius Hogenberg, should also be noticed. The extensive collection of the works of Wenceslaus Hollar is of high quality both in impression and condition, many of them being of great rarity.

DUTCH AND FLEMISH SCHOOL.

Lukas van Leyden	4	Johan Hendrik Roos		Wilhelm de Passe	1
Rembrandt van Ryn	46	A. H. Van Boom	2	Simon de Passe	5
Sir A. Van Dyck	7	H. Naeuwincx	2	Abraham Blooteling	3
Karel du Jardin	8	Dirk Stoop	2	Schelte à Bolswert	9
Ferdinand Bol	2	Barthol Breenberg	5	Cornelis van Dalen	3
Jan Lievens	1	Ludolf Bakhuysen	1	Hendrik Danckerts	1
Jan Georg Van Vliet	1	Abraham Begeyn		Jacob Willemszen Delff	3
Simon de Vlieger	1	Jan Both	4	Peter de Jode	1
Paul Potter	4	Peter Bout	1	David Loggan	2
Adriaan van de Velde	5	Nicolaas Berchem	15	Paul Du Pont	4
Hermann Saftleven	2	Cornelis du Sart	3	Gerard Valck	3
Jakob Ruysdael	1	Hendrik Goltzius	4	Peter van Schuppen	3
Adriaan van Ostade	9	The Brothers Wierix	21	Robert van Voerst	2
Antony Waterloo	3	Adriaan Matham	1	Lukas Vorsterman	2
Aldert van Everdingen	7	Jonas Suyderhoef	3	Franz van den Wyngaerde	1
Herman Swanevelt	6	Cornelis Visscher	8		
		Crispin de Passe	5		

The master piece by Lukas van Leyden of Christ presented to the People (Bartsch xii., 70) is an exceptionally bright and brilliant proof. Of the 45 etchings by Rembrandt, all of them of great excellence, The Triumph of Mordecai (Bartsch vii., 40), The Angel appearing to the Shepherds (Bartsch vii., 44), St. Jerome (Bartsch vii., 104), The Great Jewish Bride (Bartsch vii., 340), The View of Omval (Bartsch vii., 209), The Cottage with White Palings (Bartsch vii., 232), and the portraits of John Lutma (Bartsch vii. 276), The Burgomaster Six (Bartsch vii., 285), and of Uytenbogaert the Goldweigher (Bartsch vii., 283), are very choice examples. The etchings by Sir Antony Van Dyck are pure aqua-fortis impressions, including the rare one in the first state of his own portrait. And the etchings by Nicolaas Berghem, Paul Potter, Adriaan van de Velde, Herman Saftleven, Adriaan van Ostade, Herman Swanevelt and the other Dutch artists are of high quality.

The later engravings are all brilliant proofs. The Boy with a Dog by Hendrik Goltzius is very fine; and so are the examples of Cornelis Visscher, Peter de Jode, Abraham Blooteling and others; amongst those by Schelte à Bolswert, Christ mocked by the Soldiers must be mentioned, and the Dead Christ, after Van Dyck, by Lukas Vorsterman.

Amongst the most important portraits will be found:—The Plenipotentiaries at the treaty of Munster, after Terburg; and René Descartes the Astronomer, after F. Hals, by Jonas Suyderhoef. The Pistol Man, by Cornelis de Visscher. Queen Elizabeth, by Crispin de Passe. James I. and the Prince of Wales, by Wilhelm de Passe. Matoaka, otherwise Pocahontas, daughter of the Emperor of Virginia, 1616, by Simon de Passe. James, Duke of Monmouth, son of Charles II., by Abraham Blooteling. Charles II. by Heinrich Danckerts. George Villiers, Duke of Buckingham, after Mirevelt, by Jacob Willemszen Delff. Edward Hyde, Earl of Clarendon, by David Loggan. Sir Peter Paul Rubens, by Paul Pontius. Louise, Duchess of Portsmouth, by Gerard Valck. Cardinal Mazarin, by Peter van Schuppen. Robert, Earl of Lindsay, by Robert van Voerst. Lucas Vosterman, by Franz van den Wyngaerde. Albert, Archduke of Austria, by Antony Wierix. The Duke of Burgundy, by Jeronimus Wierix; and James, Marquis of Montrose, a bust, by Adriaan Matham.

FRENCH SCHOOL.

Jean Duvet - - - 1	Jean Joseph Baléchou - 1	Pauquet - - - - 1
Jacob de Fornazori - 1	Simon Gribelin - - - 8	Aristide Louis - - 1
Pierre Firens - - - 1	Johann Georg Wille - 24	Achille Louis Martinet 1
Leonard Gaultier - - 1	E. F. Lignon - - - - 6	Abraham Girardet - 6
Thomas de Leu - - 1	F. Vivares - - - - 1	J. F. Ribault - - - 3
N. de Larmessin - - 2	Robert Nanteuil - - - 5	A. Lefevre - - - - 1
Caspar Isaac - - - 1	Gerard Edelinck - - - 4	Jean Nicolas Laugier 1
Jacques Callot - - 20	Pierre Drevet, sen. - 1	Caroline Lose - - - 1
Pierre Lombart - - 9	Pierre Drevet, jun. - - 1	Constant L. Lorichon 2
J. T. Richomme - - 3	Pierre Imbert Drevet - 4	Jean Marie Le Roux - 3
Antoine Masson - - 1	Pierre Audouin - - - 1	Paolo Mercury - - 2
Matthieu Merian - - 1	Charles Clement Bervic 2	L. A. B. Desnoyers - 13
Claude Mellan - - 1	Jean Jacques de Boissieu 4	François Forster - - 5
Jean Morin - - - 1	Jean Joseph Mougèot - 1	Pierre Charles Canot 4

The great excellence to which the art of line engraving had arrived in France, especially in portraiture, is admirably represented by a numerous selection of specimens, faultless both in condition and impression, of which the following are some of the most remarkable:—

Louis XIII., when Dauphin, by Pierre Firens; Henry IV., full length, slaying the Hydra, by Leonard Gaultier; Marie de Medicis, by Thomas de Leu; Louise Françoise, Duchesse de la Valière, in the habit of a nun, by Nicolas de Larmessin the Elder; Guillaume de Brisacier (called the grey-headed man), by Antoine Masson; James, Duke of York, by Matthieu Merian; John Howell, by Claude Mellan; Guido, Cardinal de Bentivoglio, by Jean Morin; Pompone de Bellievre, after Le Brun, and Jean Baptiste Colbert, by Robert Nanteuil; Philippe de Champagne and John Dryden, by Gerard Edelinck; Jacques Bénigne Bossuet, Evèque de Meaux, after Rigaud, by Pierre Imbert Drevet; Adrienne Lecouvreur, in the character of Cordelia, by Charles Coypel; and Napoleon Bonaparte, by Jean François Ribault.

Amongst the works of James Callot are, the Temptation of St. Anthony, and the Fête Champêtre. The engravings by Johann Georg Wille are mostly fine proofs, especially L'Instruction Paternelle, after Terburg, and L'Observateur Distrait, after Francis Mièris. And there is a fine proof of the Storm, by Jean Joseph Baléchou. The examples of a more recent date are of equally high quality, such as Christ with the Reed and the Crown of Thorns, by Etienne Frédéric Lignon; St. John in the Wilderness, by Charles Clement Bervic; and, passing from Jean Nicolas Laugier, Caroline Lose, and others, beautiful proofs will be found of Achille Louis Martinet, Achille Désiré, Le Fevre, Constant Louis Lorichon, Jean Marie Leroux, Louis Augustin Boucher Desnoyers, Gerard Edelinck, François Forster, and others, after the celebrated pictures of the great Italian painters.

ENGLISH SCHOOL.

Reginald Elstracke.	William Faithorne.	William Woollett.
Thomas Cecill.	John Smith.	William Sharp.
Martin Droeshout.	William Hogarth.	Francesco Bartolozzi.
Robert White.	Sir Robert Strange.	John Scott.

The English School is more comprehensive and complete than any other portion of the collection, comprising specimens uniformly of great excellence.

The series of the works of Hogarth is nearly perfect, and one of the finest ever formed, many of them likewise being in curious early states. The works of William Faithorne, Sir Robert Strange, William Woollett, William Sharp, and John Scott are represented in choice proofs of most of the important productions of those engravers. There is a set of the Loves of the Gods, with Vertue's Title, by John Smith, after the paintings attributed to Titian, which were burned in the fire at Blenheim; and a fine impression of the Standard Bearer, by Prince Rupert.

The Portraits are of exceptionally high quality. The Art records in England of the Sixteenth Century are extremely meagre; and it is extraordinary, amongst the numerous portraits of the celebrities of the period, how many of the artists of them are entirely unknown. In this class, with many others, will be found beautiful examples of the following:—Queen Elizabeth, enthroned, with the royal arms above, and inscribed "Regia Majestas." Mary Queen of Scots, holding a cross with one hand, and having the other raised to her bosom; she is represented half-length, and in the background is introduced her execution. Prince Charles, Count Palatine of the Rhine, on horseback, with a view of London in the distance; beneath are ten lines, commencing "Great bud of honour: deare to Brittaine's king." George Villiers, Duke of Buckingham. Thomas Howard, Duke of Norfolk; a half-length, beneath an arch; under a corresponding arch, is a shield, with thirty quarterings, and the badges of the Garter and St. Michael. William Cecil, Lord Burghley; a bust in an oval, with arms and ornaments; around "Cor unum via una."

The many fine portraits in mezzotint, after the paintings by Sir Joshua Reynolds cannot be surpassed. They form a series of sixty-nine specimens, nearly all in beautiful proof states. The valuable series of portraits by Jacob Houbraken, all in proof states—mention of which will be found in the notice of Mr. Slade's books of prints—alone cost upwards of £600.

Francesco Bartolozzi is amply illustrated, especially by a highly curious set of his Marlborough Gems, very many of them in unfinished and progressive states of the plates, of which several are unique.

The art of line engraving received unusual encouragement in England from the commencement of the present century, and arrived at great excellence under the judicious and liberal patronage of numerous critical amateurs, amongst whom Mr. Slade was well known. The opportunity was rarely lost of acquiring any work which had artistic talent to recommend it, a first proof being always selected with scrupulous taste. The numerous memoranda found amongst his papers, attest the great care and skill with which the pursuit was followed; and the large accumulation of valuable specimens, now become extremely scarce and difficult to obtain, which is derived under this portion of the bequest, cannot be too highly appreciated in the opportunity they afford for studying the high degree of finish the art of line engraving had arrived at in England in the present century. The value of the acquisition is materially enhanced through the modern British School having hitherto been very inefficiently represented in the Museum. And it is so much the more to be appreciated now that a total change has taken place, from the discovery and rapid development of photography. In fact, the art of line engraving has in consequence become quite unremunerative, and has almost entirely ceased to be practised. The numerous and carefully arranged series of the present century forms, therefore, a further highly valuable addition. The composition or designs of Robert Smirke (170), Thomas Stothard (143), and Joseph M. William Turner (207), are admirably illustrated. One of the chief features of this portion of the bequest is the large number of first proofs from the engraved plates for the works of our poets, novelists, and dramatists, especially of Shakspeare, the latter being one of the most voluminous which has ever been formed. Comparatively but a small number of them having been previously possessed by

the British Museum, these records of English artists and engravers materially supplement a very important branch of the national collections.

We conclude our notice with a list of the names of the artists and engravers whose works will be found in this portion of the collection :—

Allen.
Armitage.
Brandard.
Browne.
Burnet.
Cooke.
Cousins.
Doo.
Earlom.
Engleheart.
Finden.
Finlayson.
Fisher.
Goodall.
Graves.
Hardy.
Heath.
Higham.
Jeavons.
Lane.
Le Keux.
Lewis.
Lupton.
Miller.
Pether.
Phelps.
Phillips.
Postlethwaite.
Pye.
Radclyffe.
Ranson.
Reynolds.
Rolls.
Scriven.
Shenton.
Sherlock.
Smith.
Stow.
Tomkins.
Turner.
Wallis.
Watt.
Willmore.

BOUND VOLUMES OF PRINTS.

1. Three volumes containing a set of proof impressions of Houbraken's portraits; both those illustrating Dr. Birch's lives, as well as the foreign series.

2. C. P. Marillier. A set of proofs from the head and tail pieces, designed by the artist, for the Fables de Dorat, printed on blank sheets of paper, and bound in three volumes 8vo.

3. Nova Alphati (*sic*) Effictio. A brilliant set of ornamental letters of the alphabet, engraved by Theodore de Bry. These letters have been published, on a reduced scale, in Portefeuille Historique de l'Ornement (Paris, 1861). Red morocco, by Bedford.

4. Balletti d'invenzione nella finta Pazza, di Giovanbatta (*sic*) Balbi. A series of nineteen curious etchings, by Valerio Spada, illustrating grotesque dances. Oblong 8vo. Paris. Citron morocco.

5. Viaggio da Venetia a Constantinopoli. A set of seventy-seven plates; proofs before the text, by Giacomo Franco, with Title, by Sadeler. Folio. Venice. Olive morocco, by Bedford.

6. A series of twenty-two plates, by Giacomo Franco, representing Venetian costumes, pageants, and processions. Folio. Brown calf.

7. Vedute et prospettive di luoghi dishabitati di Roma. Fifty-three etchings, by Giovanni Battista Mercati. Old red morocco, with arms on the sides.

8. Effigies, nomina, et cognomina, S.D.N. Innocenti XI. et RR. DD. S.R.E. Card. nunc viventium. A set of sixty-nine portraits of the Pope and Cardinals, engraved by Alb. Clouet, Joseph Testana, Jac. Blondeau, Bern. Baliu, Tibo, and Arnold van Westerhout. Published at Rome, by J. J. de Rubeis. Folio. Red morocco, with the arms of Prince Eugene of Savoy.

9. The Life of Christ, by Jean Luyken; small compositions, in eighteen sheets, with blank spaces left for subjects not represented.

10. Fables de la Motte. A series of sixty-eight etchings, by Claude Gillot. Proofs before letters. Old red morocco.

11. Figures de l'Histoire de France dessinées par M. Moreau le Jeune et gravées sous sa direction: avec le discours de M. l'Abbé Garnier. The original drawings by Moreau, and proofs of the plates, together with Moreau's order to deliver the plates to M. Renouard, dated 1813. Four vols. 4to., red morocco. Paris, 1785, etc. From Renouard's Library.

12. Brockedon's Passes of the Alps. A series of ninety-eight plates, in the etched state, by Brandard, E. Finden, C. Westwood, J. T. Willmore, T. Jeavons, etc. Folio. 1828.

WERTHEIMER, LEA AND CO., PRINTERS, CIRCUS PLACE, FINSBURY.

ADDITIONS AND CORRECTIONS.

Page ix. Line 21, *dele* "here."

,, xix. ,, 39, *for* "opaque yellow colour, &c." *read* "opaque pastes; yellow, and two or three shades of green are far from rare."

,, xx. ,, 4, *for* "produce the kind of patterns thus displayed," *read* "exhibit the kind of patterns thus produced."

,, xxv. ,, 22, *for* "conjoined," *read* "met."

,, xxiii. ,, 8, *for* "Bishop Lismore," *read* "Bishop of Lismore."

,, xxviii. Note †, *after* "Loan," *add* "at South Kensington."

,, xxxi. ,, †, *for* "Don Burnel, the Ape," *read* "Dan Burnel, the Asse."

,, xxxviii. Line 11, *for* "those," *read* "that."

,, 10, No. 85, This specimen was not found in the Greek Archipelago but on the Rhine.

,, 21, ,, 117, *for* "Xante," *read* "Xanten."

,, 26, ,, 152, This is probably a Cinque-cento paste, taken from an antique cameo in the Naples Collection.

,, 27, ,, 158, "A scaraboid of deep blue glass of Archive Style, probably Phœnician; it represents a man seizing a gryphon."

,, 39, ,, 240, "From the Greek Archipelago."

,, 45, ,, 270, "Height, $3\frac{3}{4}$ in."

,, 55, *Omit the Sub-Title*, "TEUTONIC GLASS."

,, 74, No. 384 to 386, may be of German origin.

,, 88, ,, 481, "Height, $7\frac{5}{8}$ in."

,, 90, ,, 486, "Among the filigree ornaments are the arms of Baden."

,, 92, ,, 499, *for* "Strawberry bosses," *read* "Lion's heads."

,, 98, ,, 527, *for* "purple," *read* "amber."

,, 106, ,, 586 *is* "Fig. 182;" *and* No. 588, "Fig. 180."